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ABSTRACT

This handbook contains suggestions for teaching the facts, principles, and behaviors relevant to civil defense in social studies classes, grades 1-12. These classes were chosen as the entry point for civil defense education because the core of the civil defense concept is government in action with other community agencies to save lives and property in man-made or natural disasters. The materials are grouped by lower, intermediate, and secondary grade levels. Each section includes: 1) a general statement to the teacher including goals, suggestions for performance objectives, activities, and source materials; and, 2) 11 sample units are in three sections entitled: Acquainting Children with Civil Defense, Involving Children in Civil Defense, and The Student and Government in Emergency. Seven appendices include: a Student Checklist for School Emergencies, Outline for Family Emergency Planning, annotated bibliography, list of government films for the units, a glossary of terms, and rosters of State Civil Defense Officials and Education Coordinators. (Author/DJB)

ED 059115

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MP 56
May 1970

GOVERNMENT IN EMERGENCY

Suggestions for Including Civil Defense Principles in the Social Studies Curriculum: Grades 1-12

SP 002121

DEPARTMENT OF DEFENSE
OFFICE OF CIVIL DEFENSE

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FOREWORD

> "Development of knowledge and responsible patterns in children prior to disaster situations appears to reduce anxiety in children during disaster and diminish deleterious effects in general."

This handbook resulted from research indicating the acceptability and suitability of civil defense concepts in the school curriculum .

On the basis of the research the Office of Civil Defense, Department of Defense, has undertaken to conduct a series of dialogues, conferences, and workshops with educators and textbook publishers to explore the inclusion of civil defense principles and practices in the school curriculum and in textbooks in suitable subject areas on all levels. As a beginning, the Office of Civil Defense contracted with Leadership Resources, Inc., an organization of behavioral and management scientists, to conduct a pilot workshop in the preparation of civil defense curriculum materials, to coordinate tryouts of the materials with students, and to pull together the results into a handbook for teachers, to be made available throughout the United States.

The handbook represents the work of a group of social studies teachers from Maryland and the District of Columbia during a two week civil defense curriculum workshop in the summer of 1968. During the last two days of the workshop the teachers were joined by supervisory personnel from the school systems of those in attendance; representatives of the Maryland State Department of Education and the Maryland Civil Defense Agency; the Alexandria, Virginia, school system; and the textbook publishing industry. They reviewed the materials and discussed plans for their effective use. The materials were then edited and re-submitted to participants for their further suggestions. On the basis of these suggestions the handbook was again revised. In the spring of 1969 this second revision was tried out in actual class room situations in the school systems of those who prepared the materials in the first place, and in other schools in Maryland. The reported experiences and the recommendations of the teachers using the materials have been the basis for this final revision of the handbook.

From the inception of the project the advice of the National Council for the Social Studies, the American Educational Publishers Institute, and the Maryland State Department of Education was sought. In addition, prior to the workshop, a Resource Group composed of leading educators and civil defense officials was chosen as advisors. The Resource Group met in Washington on May 3, 1968 to counsel on the content and conduct of the workshop, and also, on ways of getting the materials introduced into the mainstream of the social studies curriculum nationally. This edition reflects the efforts and judgments of the Office of Civil Defense, the Civil Defense Education Branch of the U. S. Office of Education, and Leadership Resources, Inc.

Grateful acknowledgement is made to the members of these groups, to the consultants from education and the publishing industry who helped with the workshop, and to the many others who have given advice and counsel and assisted in other ways.

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[1] Lutz, Frank W., Special Problems of Children in Civil Defense Planning, PCD Contract OS-63-114, 1967, published by Human Sciences Research, Inc., Westgate Research Park, 7710 Old Springhouse Road, McLean, Virginia.

OVERVIEW

Rationale

This handbook on Government in Emergency contains suggestions for teaching the facts, principles, and behaviors relevant to civil defense in social studies classes, grades 1 - 12. It resulted from a conviction by leading educators and officials of the Office of Civil Defense that civil defense content and behavior should be incorporated into the school curriculum on all levels of instruction.

Civil Defense is not new. Man has always had to protect himself from the horrors of war, from the elements, and from other man-made and natural disasters. Our forefathers often had to protect themselves almost wholly on a self-help basis. As communities developed, men banded together and organized agencies to help the individual with the problems of disaster. With the coming of the Nuclear Age it became necessary to go a step further and for government to establish agencies to protect the civilian population from the effects of nuclear war. As a result the Office of Civil Defense was established by act of Congress in 1950 to develop national programs and to assist State and local governments in developing local programs for saving lives in case of nuclear attack and fallout.

Through the years with the increasing complexity of the international situation, advanced technology, and population explosion, urbanization, and other modern problems, the civil defense agencies have come to join with other elements of our society to serve in all emergency situations - fire, flood, storm, civil disturbances, major breakdown of communications, and the like. Hence, civil defense has become an integral part of the normal pattern of government on local, State, and national levels; and the knowledge and skills necessary to survival in the nuclear age have become a part of our culture. Furthermore, research conducted by independent agencies under contract to the Office of Civil Defense, Department of Army, has indicated that the principles and practices of civil defense and its organization to meet emergencies are acceptable and suitable in the school curriculum.

Our children and youth must learn how civil defense agencies function, what services they provide, what citizen action must be taken to make them effective, and what families and individuals still must do for themselves in time of nuclear war and other emergencies to survive and to help others survive.

Why Social Studies?

Civil defense concepts are relevant to all subject areas and levels of instruction from kindergarten through college: to the common areas of social studies, science, English, mathematics, health and safety; to the elective areas; and to extra-curricular activities. In fact, excellent

curriculum materials containing instruction in protective measures in case of nuclear fallout and other catastrophies have been prepared in some of these subject areas, notably in health and safety.

A study of civil defense and the school curriculum led to the choice of the social studies as the logical point of entry for this curriculum project. Social studies deals with growing social organisms and man's interdependence, and the core of the civil defense concept is government in action with other community agencies to save lives and property in disaster. Furthermore, present trends in the social studies are toward innovation, increased attention to current affairs, experimentation with grade placement, and use of multi-media. It seems suitable, therefore, to introduce civil defense as a new element into the social studies curriculum. From this base the understandings and behaviors developed can feed the whole curriculum.

Organization

This handbook is the result of a joint effort by educators and civil defense officials to introduce civil defense into the school curriculum in the appropriate subject area, at the appropriate grade level from kindergarten through college. It is the work of social studies teachers and supervisors, publishers' representatives and civil defense officials. A short pilot workshop prepared sample social studies materials for grades 1 through 12. The principles and units developed in the workshop were then tried out in nine school systems by 81 teachers and the handbook was revised in accordance with their experience and recommendations.

You will find that the materials are grouped for two education levels - elementary and secondary. Elementary is divided into two sub-groups - lower grades and upper grades. Secondary, however, covers both junior and senior high school grades and no attempt has been made to treat them separately. For each of the above there is a general statement to the teacher including goals, followed by suggestions for performance objectives, activities, and source materials. Under each grouping there are sample, freestanding units that may be used alone or interchangeably, plugged in wherever they are relevant to other overall established subject areas, units and objectives. A suggested time for each unit is included as a general guide, based on the time used by the teachers who have taught the units.

The units, because they are samples, vary in concept and organization. In some, for example, the suggested activities are sequential and should all be included and developed in order. In most, the suggested activities are presented as varied ways in which the proposed objectives can be achieved. Subject areas and other units of instruction to which the civil defense units are relevant are sometimes mentioned. But selection should be made among the suggested units on the basis

of where in the design of the particular social studies curriculum they fit, the time to be devoted to the subject area, the abilities of the students, and all the other considerations that go into curriculum planning.

With some modifications most of the suggested activities and many of the sample units are suitable for levels of instruction other than those suggested. Many units and activities are also quite suitable in whole or in part for subject areas other than the social studies, and for combining with other subjects. It is, in fact, anticipated that as these freestanding units are used there will be a cross-over into other curriculum areas and the development of new materials in all subject areas.

Before reviewing the rest of the handbook, teachers will want to read two OCD publications, In Time of Emergency, and Personal and Family Survival, particularly chapter 1 of the latter, for an overview of civil defense. They are provided with this handbook and it will not take long to look them over. Those who wish a more thorough knowledge of civil defense, should see the local Director of civil defense or write to the State or Regional Civil Defense Agency about enrolling in the course Personal and Family Survival or Civil Defense, U.S.A., A Programmed Orientation to Civil Defense.

Materials

The resource materials listed in the units are limited to those that are directly related to the content of the units, and are available from the Civil Defense Education Coordinator usually in the State Department of Education, the local and State civil defense agencies, or through civil defense distribution channels. More detailed instructions on procurement of materials are contained in Appendix III. In most instances the local civil defense agency will have additional materials that are more directly applicable to the local situation. Civil defense officials are eager to help. Many state education agencies working together with State civil defense agencies, have published civil defense manuals containing curriculum suggestions and guidance on school plans for schools in the State.

The films listed are available not only through civil defense channels, but some are to be found in some school instructional aids centers. The bibliography in the appendix is more comprehensive than the listings in the units, but is still limited to materials that are readily available as we go to press.

Of course, the materials students and teachers find from other sources - libraries, magazines, newspapers - and produce themselves for their particular needs and situations, are most useful. Teachers will certainly want to add to the materials list from these sources.

ACQUAINTING CHILDREN WITH CIVIL DEFENSE

LOWER ELEMENTARY GRADES

To the Teacher:

In general, the purpose of the elementary social studies program is to broaden the child's horizons by providing experiences and learning opportunities that begin with his home and neighborhood and extend to the local community and then to the world beyond.

Civil defense, as an agency and a program, is an integral part of life today. Civil defense agencies are a part of the government structure at all levels. The local civil defense agency serves the home, the neighborhood, and the community in the same manner as the better known fire and police departments. Planning for individual, family, and government action in time of disaster is illustrative of man's interdependence and calls for the exercise of group and individual responsibility. Furthermore, since a protection program is an essential element in the contribution of the school to civil defense, each child must be made aware of the necessity of planning for protection and the kind of behavior expected in emergency.

In this sense, and others, the facts and principles of civil defense are compatible with many usually accepted generalizations and behavioral objectives in the social studies. Some of the basic ideas which could be developed through a study of civil defense include:

Man is becoming increasingly interdependent.

Self preservation is a basic human drive.

The family is the basic unit of society.

Government, in our society, exists for the good of all.

The behaviors or skills which can be developed through this material include:

Basic reading and writing skills including research techniques and the ability to analyze and organize data.

Map, graph, and chart making and interpreting ability.

The ability to understand complex ideas.

Acquiring attitudes and values.

As you plan lessons in this area you need to know for yourself basic facts about civil defense. The simply written citizen's handbook, In Time of Emergency, is listed as one of the basic references in all units in this handbook, and is made available to all teachers and pupils. You will find this booklet invaluable, particularly pages 1 through 5 and the summaries at the beginning of each chapter. Facts about local conditions are even more relevant. You should know, for example, (1) the kinds of disasters that may strike your community - man-made and natural, (2) your local civil defense plan and organization, (3) the school fire drill and emergency plans, (4) the warning system and the meaning of signals, (5) where the fallout shelters are located in your community and how they are stocked, and (6) the basics of both family and community planning for shelter occupancy.

Your local Civil Defense Director and his staff are, of course, your primary source of information on all local civil defense plans and facilities. They can supply you with a wealth of printed and visual material, including recommended films. They will be as helpful as possible.

As explained in the overview to this handbook, the units are sample, free standing modules designed to be plugged into the specific course of study where they fit. For example, some of the primary teachers and supervisors who prepared and tried out these materials mentioned these behavior and content areas to which civil defense ideas are related: local government and resources; understanding our responsibility to school, home, community and country; protecting people and property; transportation; democratic behavior; effective group processes; our community, increasing interdependence of people; and family preparation for hardship.

The units are not designed to form a progressive, full course in the social studies phases of civil defense. In most units, therefore, it will be necessary to give pupils some background of facts about civil defense. What the children will need to know will vary widely depending upon what they already know, the grade level and ability level of the class, where you choose to fit the unit into the curriculum, what the local government organization for emergency action is, what kinds of disasters have occurred or are likely to occur in your community, and many other factors. Identifying and assembling needed facts may be accomplished by such simple means as (a) pupil involvement in telling, and then writing a group theme or letter; (b) the teacher's writing a handout in appropriate language listing the facts needed from the booklet, In Time of Emergency; (c) building the necessary bits of knowledge into discussions of displays and other visuals that can be provided by the local Director of Civil Defense; or (d) a talk by the local Director of Civil Defense, based on your briefing on what information is needed.

The evaluation suggestions are intended only as guides to ascertain whether or not the objectives have been attained and should not be viewed as grading devices. Since learning is a combination of acquiring knowledge and developing skills and attitudes, evaluation should reflect this obvious combination.

Materials:

In so far as we know, no written materials or instructional aids on organization and planning for community disasters have been prepared specifically for elementary grades. Hopefully, the ideas in this handbook and your use of them will stimulate inclusion of emergency preparedness subject matter in books and illustrative materials for the primary grades. Meanwhile, you will find it necessary to do what you do in many other situations - devise and find your own.

Basic references preceded by o are supplied with this handbook. For descriptions and information on procurement of additional copies of basic references and other materials, see appendixes III and IV.

1. Basic References: (for teachers)

   o a. In Time of Emergency, OCD/DOD. H-14. 1969.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision.

   c. Publications, displays, and other instructional aids supplied by local civil defense agency.

   d. Your State Department of Education / Civil Defense Agency Civil Defense manual for Schools.

2. Other References:

   a. Status of the Civil Defense Program, OCD/DOD. MP-46. Apr. 1969.

   b. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

   c. Community Involvement in Civil Defense: Suggestions by the American National Red Cross, OCD/DOD. H-11-A. 1965.

   d. Realistic Approach to Civil Defense, A, AASA, NCSS, OCD/DOD. MP-36. 1966.

e. American Junior Red Cross News.

f. Weather Bureau publications, films and filmstrips.

g. Periodical and newspaper clippings and pictures about disasters.

h. Library books on storms and other natural disasters.

3. Films: (See Appendix IV for descriptions)

a. Face of Disaster, The, DOD CD 20-239, b/w, 10 min.

b. Five Days of Betsy, The, DOD CD 20-250, b/w, 11:30 min. or Hurricane Called Betsy, DOD CD 20-251, b/w, 28:54 min.

ACQUAINTING CHILDREN WITH CIVIL DEFENSE
LOWER ELEMENTARY GRADES

SAMPLE UNIT 1
AN INTRODUCTION TO CIVIL DEFENSE

10 to 15 class sessions

General Purpose: To understand that the civil defense agency is a community institution, established for the protection of the community in times of disaster.

Performance Objectives:

Gather and organize information about the responsibilities of local government during emergencies.

Define disaster, and list natural and man-made disasters that might occur in the community.

Gather and organize information about public fallout shelters and locations.

Suggested Activities:

1. Include the Civil Defense Director in your unit on community helpers, and treat in the usual manner.

2. Discuss various kinds of disasters based where possible on current events, with the purpose of developing a definition of "disaster."

3. Develop a student bulletin board display of disasters, both natural and man-made.

4. Collect clippings of news stories and pictures of natural disasters and make into a booklet.

5. Show the film The Face of Disaster or The Five Days of Betsy, or both, and discuss. Display pictures from newspapers and periodicals showing the suffering and distress resulting from man-made and natural disasters.

6. Visit the local civil defense office. The teacher and the class should develop a set of questions to be answered during the trip, such as:

   a. Where is our civil defense office located?

b. Do many people work at the office?

c. What do they do?

d. How do civil defense workers know when there will be trouble?

e. How do the civil defense workers let us know there will be trouble?

f. What does the public fallout shelter sign look like? Why is it called a "fallout" shelter.

7. Take a walk to locate public fallout shelter signs in the neighborhood.

8. Invite the local Civil Defense Director to come or send someone to talk with the class about the work of civil defense in your community. The children should have questions to ask. The service performed by the agency should be emphasized.

9. Visit the school emergency shelter areas with the principal.

10. Write a summary of what has been learned from the field trip or the civil defense worker's visit, either as individuals or in the form of a cooperative experience story.

11. Write and present a play on an imaginary local disaster. See page 12 for an example.

12. Locate on a map of the community the police, fire, and civil defense offices and public fallout shelter locations.

Evaluation:

1. Have the students make and explain drawings of events which would require a special emergency ("civil defense") response by local government.

2. Discuss with the students their understanding of the terms "disaster" and "emergency" and develop class definitions of the terms.

3. Have the students compare, either verbally or in writing, the roles of various community helpers in times of emergency. Ask which they would like to perform and why.

4. Write a story or make a booklet about civil defense; what it does and what the individual can do to help, for the use of families, friends, or another class.

5. Administer a simple objective test to determine what the class has learned. See sample test, page 15.

6. Have a "show and tell" for children to bring in pictures or things having to do with natural and man-made disasters.

Materials:

Basic references preceded by o are supplied with this handbook. For descriptions and information on procurement of additional copies of basic references and other materials see Appendixes III and IV.

1. Basic References: (for teachers)

   o a. In time of Emergency, OCD/DOD. H-14, 1968.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Ch. 4,5,7 -- pages 87-91, and Appendix.

   c. Publications, displays, and instructional aids supplied by the local civil defense agency.

   d. State Department of Education State civil defense agency manual for schools.

2. Other References:

   a. Status of the Civil Defense Program, OCD/DOD. MP-46. Apr. 1969.

   b. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

   c. Community Involvement in Civil Defense: Suggestions by the American National Red Cross, OCD/DOD. H 11-A. 1965.

   d. Realistic Approach to Civil Defense, A, AASA, NCSS, OCD/DOD. MP-36. 1966.

   e. American Junior Red Cross News.

   f. Weather Bureau publications, films and filmstrips.

   g. Periodical and newspaper clippings and pictures about disasters.

   h. Library books on storms, etc.

3. Films:

a. Face of Disaster, The, DOD CD 20-239, b/w, 10 min.

THE FLOOD
(A Sample Play)

Narrator-- The people in our town did not often think about the river. It was always there, but somehow it did not seem important. Then one day it began to rain. It rained for days and days. Every day there was more and more water in the river. The banks of the river were not very high in the town. People began to talk about what would happen if the rain did not stop. The rain did not stop and this is what happened.

Mr. Allen-- Turn on the radio, John. See if there is any news about the river. (John turns on radio)

Radio Announcer -- It looks like the town is in for a big flood! The river is going over its banks. Main Street is under water now. Families are moving out. Higher places should be safe. But stay at home and keep your radios on. We will let you know just what to do.

Mr. Allen -- I must put our boat on the car and go down to the river to help.

Mrs. Allen -- What if the river comes up here? Won't we need our boat?

John -- It won't come up this high. Grandfather said so. He told me about two floods the town had long ago. The water didn't come up this high then.

Mr. Allen -- I think Father was right. It is safe here, but I am needed at the river. You go to sleep now. I will see you in the morning.

Narrator -- At last, the family went to sleep. (turn off lights) They were sleeping soundly when they heard -

Grandfather -- John! John! Everybody! Get up. Get up. We have to get out of our house!

John -- Is it the flood, Gramps?

Grandfather -- Yes, the river is coming up here after all. We are going to your Uncle Bill's farm.

John -- Why don't you turn on the lights, Gramps? It is so dark. I can't see anything.

Grandfather -- We can't turn on the lights. The electricity is off all over town.

Mrs. Allen -- John, please take the radio and some of these things out to the car. We may not be back for days, so we must take food and clothes with us tonight.

Narrator -- Grandfather, Grandmother, Mother, John, and Janey got into Grandfather's car. Slowly down the dark streets they went. Already the streets were under water. Water was coming up higher and higher on the car. Before long a civil defense worker stopped them.

First Civil Defense Worker -- You can't go on, the water is too high.

Grandfather -- I have to get to my boy's farm. He lives out on the highway. I must go this way.

First Civil Defense Worker -- I'm sorry but you can't get there tonight. There is no way to get to the highway from here.

Grandfather -- Where can we go?

First Civil Defense Worker -- Turn around and go up the hill to the high school. Many people are there already. You will be safe there.

John -- What about Father? He won't know where we are.

Grandfather -- The radio will tell him about the roads. He will find us.

Narrator -- Many people were at the high school already. More and more were coming from every direction. There was no electricity. Car lights and spotlights on police cars helped people find their way into the dark building. Each person did what he was told to do.

Second Civil Defense Worker -- All refugees come this way.

John -- Are there refugees here?

Mother -- We are all refugees.

John -- But Mom, refugees come from another country, don't they?

Mother -- Yes, usually, but anyone who has to leave his home and go to a safer place is also called a refugee. Come on. Let's go, Little Refugee!

Third Civil Defense Worker -- Come this way, you can sleep here.

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Narrator -- There was little sleep for John Allen that night. There was little sleep for anyone in the town. The men at the radio station were busy all night telling people what to do. Civil defense workers went from house to house to get people out of their homes. Some people did not leave their homes in time. Mr. Allen and other men with boats helped them get to a safe place. Men and high school boys worked all night. They were trying to hold the river water back. Women and older girls worked all night too. They had to get food, clothing, and other things ready for the refugees.

After three long days, the flood was over. The people went back to their homes. On their way, they saw what the flood waters had done to the town. When they got home, they saw what the flood had done to their homes, too. Water had come part way up on the door. There was much to do. It would be a long time before they would be able to live as they had lived before the flood.

John -- We didn't think the river was very important. But it showed us, didn't it?

NAME _____ SCHOOL _____

DATE _____ GRADE _____

TEST - AN INTRODUCTION TO CIVIL DEFENSE

Write T before each sentence that is true. Write F before each sentence that is false.

_____ 1. There are 40 Civil Defense shelters in (City, Town, or County)

_____ 2. In an emergency you should depend on the radio or television instead of the telephone for information.

_____ 3. Knowing your community alert and warning signals is not important.

_____ 4. Public fallout shelters should be marked with the standard yellow and black sign.

Kinds of Disasters

Write 3 natural disasters

1.

2.

3.

Write 2 man-made disasters

1.

2.

Definitions

Write the meaning of each word.

1. disaster

2. emergency

Write a story about what civil defense does and what the individual can do to help.

ACQUAINTING CHILDREN WITH CIVIL DEFENSE
LOWER ELEMENTARY GRADES

SAMPLE UNIT 2
THE FAMILY PREPARES FOR AN EMERGENCY

12 to 15 class sessions

General Purpose: To understand that each individual and every family has an important role to play in preparing to meet an emergency or disaster and that each family member shares these responsibilities.

Performance Objectives:

Understand that community emergencies affecting the family may occur.

Know the role of each member of the family in keeping the family safe in time of emergency.

Analyze the need for providing emergency shelter and other survival necessities in the home, and plan individual responsibilities.

Gather information on how others in the community may help when a disaster strikes.

Suggested Activities:

1. Discuss with the students why families exist and what families do.

   Emphasize:

   Interdependence within the family.

   The role of various members.

   Protection of the family members and their health and well-being.

2. Ask the students to tell ways in which the family depends on other families and other members of the community. Develop the idea of interdependence and cooperation.

3. Look at pictures of disasters from newspapers and periodicals or show the movie, The Face of Disaster. Have individual students tell what they would do at such a time and how their families might react.

4. Introduce the idea of disaster or emergency (see To The Teacher, pages 4-6 for ways of handling the necessary factual background). Discuss with the class various kinds of disasters that might affect their family and community. Bring out the ideas that:

   An emergency may occur.

   We should be familiar with the disasters that might strike our families.

   We should learn to recognize the alert and warning signals.

   We should recognize the need for family planning to meet disasters, including learning where public fallout shelters are located.

   We should work out the role of each member in keeping the family safe, and know the role of community helpers in times of emergencies.

5. Plan a home cleanup campaign to make it safe from fires.

6. Discuss with the class the word "shelter" and the various kinds of shelters, (storm cellars, Red Cross hurricane shelters, public fallout shelters).

7. Locate public fallout shelters in the neighborhood on a class-made map; discuss their purpose and then introduce the term "community shelter" for further discussion.

8. Have individual students or small committees make lists of things they think should be done to prepare their families for an emergency. Compare and discuss these lists.

9. Through the use of current events, develop the idea that families all over the world have disasters. Discuss the ways families far away can help.

10. Make posters of alert and warning signals and public fallout shelter signs and discuss what they mean.

Evaluation:

1. Have the students make pictures and tell stories about different kinds of disasters and some of the things they and their families can do to prepare for them.

2. Fill out together A Student Checklist for School Emergencies and An Outline for Family Emergency Planning. (Appendixes I and II.)

3. Make simple models of types of home shelters. Use them as a school display.

4. Discuss the story of "The Grasshopper and the Ant" and see if the students can relate this to disaster readiness.

5. Compile lists of Do's and Don'ts for disaster preparedness.

6. Prepare and present a skit on family planning to meet disaster to another class or to the PTA.

7. Make a class list of useful definitions of terms related to disasters.

8. Discuss with the students the idea of community interdependence to find out whether or not they understand that the family and the individual depend on others in time of emergency.

9. Use identification and matching tests. See examples on pages 20 to 22.

Materials:

Basic references preceded by o are supplied with this handbook. For descriptions and information on procurement of additional copies of basic references and other materials see Appendixes III and IV.

1. Basic References: (for teachers)

   o a. In Time of Emergency, OCD/DOD. H-14. 1968.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 (Revision).

   c. Publications, displays, and instructional aids supplied by the local civil defense agency.

   d. State Department of Education/State Civil Defense Agency manual for schools.

2. Other References:

   a. Status of the Civil Defense Program, OCD/DOD. MP-46. Apr. 1969.

   b. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

   c. Community Involvement in Civil Defense: Suggestions by the American National Red Cross, OCD/DOD. H 11-A. 1965.

   d. Realistic Approach to Civil Defense, A, AASA, NCSS, OCD/DOD. MP-36. 1966.

e. American Junior Red Cross News.

f. Weather Bureau publications and filmstrips.

g. Periodicals and newspaper clippings and pictures about disasters.

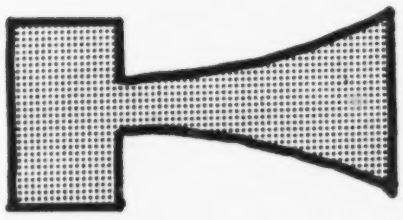
h. Encyclopedia descriptions of kinds of storms and library books about storms and other natural disasters.

3. Films:

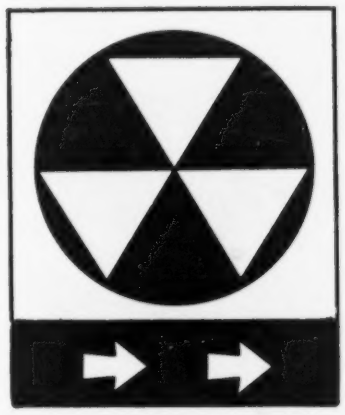
a. Face of Disaster, The, DOD CD 20-239, b/w, 10 min.

MATCH

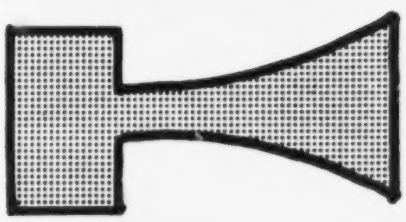
Draw a line from each picture to the phrase that tells about it



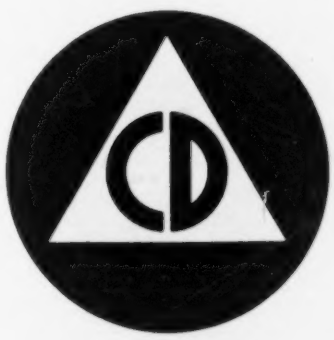
1 FALLOUT SHELTER



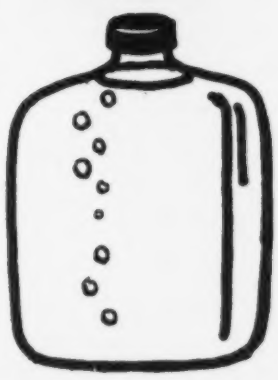
2 ALERT OR ATTENTION SIGNAL



3 CIVIL DEFENSE

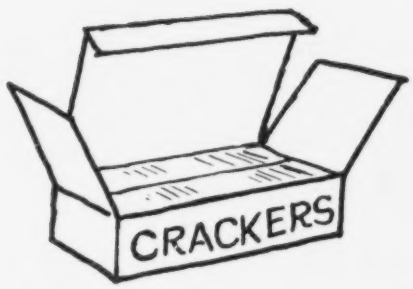


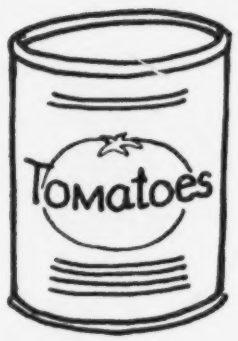
4 ATTACK WARNING

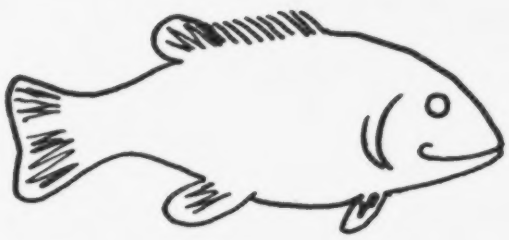


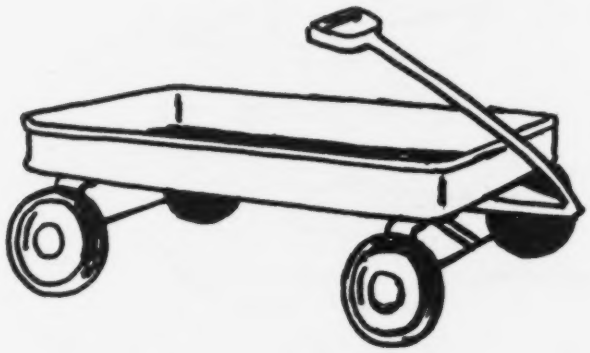
5 WATER FOR SHELTER

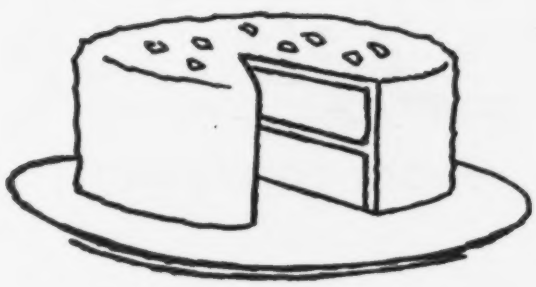
Color the things we would NEED in a SHELTER

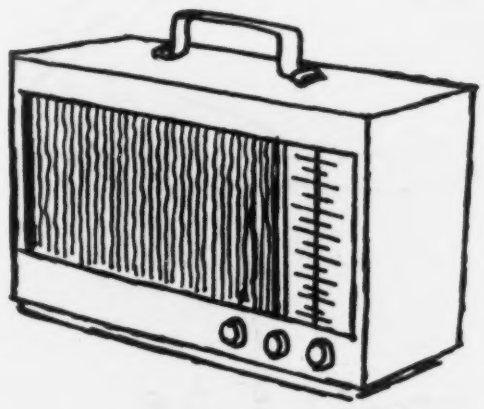












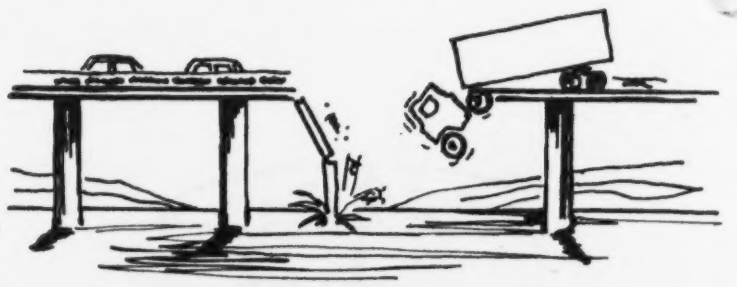
DISASTERS

Put a blue circle around NATURAL disasters and a red circle around MAN-MADE disasters

WINDSTORM

FIRE

SNOWSTORM



BRIDGE COLLAPSING

NUCLEAR ATTACK

EARTHQUAKE

INVOLVING CHILDREN IN CIVIL DEFENSE
UPPER ELEMENTARY GRADES

To the Teacher:

In the upper elementary grades where the social studies curriculum tends to become more content oriented, with such courses as State and American History and geography commonly taught, there are many opportunities to incorporate major ideas concerning action and interaction between government, organizations, and individuals in the event of man-made or natural disasters. The teachers and supervisors who prepared the materials and tried them out suggested these course and subject areas: in geography following units on States in which floods, tornadoes, etc., occur, and in current events during the seasons of the year when storms are common. They also recommend the interlinking of emergency concepts with: organizing and governing; protecting and preserving life; and producing, exchanging, and consuming goods and services.

Older children have, through the various news media, a basic understanding of world conflict and the necessity for preparedness in case of emergency or disaster resulting from war. The ideas presented therefore can be more complex than those used in the lower grades.

If you have not already done so, review the Overview to this handbook, pages 1 to 3, for the concept behind civil defense in the social studies, the organization of the handbook, teacher preparation necessary, and the use and procurement of materials. The "To the Teacher" section preceding the elementary lower grade units also will be helpful.

The generalizations and performance objectives states below are intended as a guide for including this material in the existing lower grade programs.

Generalizations:

Disasters, both natural and man-made, may strike any time and anywhere.

Individuals, families, and communities need to know what to do to protect themselves in time of emergency.

Man is becoming increasingly interdependent.

Government exists for the good of the governed and is dependent upon the participation of the governed.

Performance Objectives:

Developing skill in gathering, organizing, and transmitting information.

Developing the ability to analyze and understand complex events.

Acquiring attitudes and values concerning individual responsibility and interdependence.

The evaluation suggestions are intended only as guides to determine whether or not the objectives have been attained, and should not be viewed as grading devices. Since learning is a combination of acquiring knowledge and developing skills and attitudes, evaluation should reflect this obvious combination.

Materials:

See Appendixes III and IV for descriptions and information on procurement. Basic references preceded by o are supplied with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968. Chs. 1, 3, 4, 6, 7, 9; Part II.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Chapters 2, 4, 5, 6, 7, 9 and Appendix.

   c. Publications and instructional aids supplied by the local civil defense agency.

   d. State Department of Education/State Civil Defense Agency Civil Defense manual for schools.

2. Other References and Instructional Aids:

   a. Community Involvement in Civil Defense, OCD/DOD. H-11-A. 1965.

   b. Realistic Approach to Civil Defense, A, AASA, NCSS, OCD, OCD/DOD. MP-36. 1966. (For teachers)

   c. Newspaper and periodicals such as the Junior Red Cross News.

   d. Information and illustrative material on plans for action in time of disaster provided by the fire department, the department of sanitation, the health department, the U. S. Department of Agriculture Extension Service, etc.

   e. Maps and diagrams of the community and school.

   f. "A Student Checklist for School Emergencies" - Appendix II.

g. "An Outline For Family Emergency Planning" - Appendix II.

h. Recording of alert and warning signals (If available from your local civil defense agency.)

3. Films:

a. Five Days of Betsy, The, DOD CD 20-250, b/w, 11:30 min.

b. Shelter on a Quiet Street, DOD CD 5-221, color, 24:30 min.

c. Briefly About Fallout, DOD CD 3-256, color, 9 min.

INVOLVING CHILDREN IN CIVIL DEFENSE
UPPER ELEMENTARY GRADES

SAMPLE UNIT 1
REACTING TO CIVIL DEFENSE WARNING SIGNALS

6 to 10 class sessions

General Purpose: To prepare the students to react in a responsible manner to civil defense alert and warning signals and to know and understand the purpose and use of shelter areas.

Performance Objectives:

Gather and organize information about civil defense alert and warning signals.

Analyze and understand how they should react to the alert and warning signals.

Suggested Activities:

1. To introduce this unit, ask the children to discuss with their parents what they should do, both as individuals and as a family, if the civil defense alert or warning signal sounds. Discuss in class the various responses from home.

2. If it is clear at this atage that the class does not know the basic facts about the functions of the civil defense organization in planning and meeting emergencies, begin with a brief orientation to civil defense through a technique such as:

   a. A talk on the subject by a local government official,

   b. Preassigned reports by individuals or committees on pertinent portions of the basic references,

   c. A fact sheet prepared by the teacher and discussed by the class.

3. Have the pupils collect information from newspapers, periodicals, radio, TV, etc., on natural and man-made disasters that might occur in your area.

4. Have a group of students write a skit on responses to the alert or warning signals, based on the movie, but related directly to your community.

5. Have committees work with the principal on:

   a. Plans for responding to warning at school, and

   b. An inventory of school facilities and equipment to meet emergencies.

6. Prepare a map showing the location of local public fallout shelters.

Evaluation:

1. Give a written quiz on the alert and warning signals and the local public fallout shelters.

2. Have the class prepare a questionnaire for a final interview with their parents, and analyze the answers. See sample questionnaire on page 23.

3. Put on the board "No Man is an Island" and ask the class to discuss this idea as it relates to civil defense.

Materials: See Appendixes III and IV for descriptions and information on procurement. Basic references preceded by o are supplied with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968. Chs. 1 and 3.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Ch. 7.

   c. Publications and instructional aids supplied by the local civil defense agency.

   d. State Department of Education-State Civil Defense Agency Civil Defense manual for schools.

2. Films:

   a. About Fallout, DOD CD 3-220, color, 24 min.; or Briefly About Fallout, DOD CD 3-256, color, 8:18 min.

   b. Five Days of Betsy, The, DOD CD 20-250, b/w, 11:30 min.

3. Other Instructional Aids:

   a. Recording of the alert and warning signals (if available from your local civil defense agency).

   b. "A Student Checklist for School Emergencies," Appendix I.

   c. Local map.

(Example)

REACTING TO CIVIL DEFENSE ALERT AND WARNING SIGNALS
(STUDENT'S INTERVIEW WITH PARENTS)

In our class at school we are studying what to do when the civil defense attention or alert signal sounds for a natural or man-made disaster. We now realize that everyone needs to know about the signal if all people are to be protected in case of emergency caused by storms or other disturbing things.

Will you answer some questions?

1. Do you know the purposes of the civil defense organization?

   Yes _____ No _____

2. Do you know the civil defense attention or alert signals?

   Yes _____ No _____

3. Do you turn on your radio when you head warning signals?

   Yes _____ No _____

4. Would you like more information about disaster preparedness?

   Yes _____ No _____

5. Do you have family plans on what to do when the signal sounds?

   Yes _____ No _____

6. Do you know where the public fallout shelter or shelters available to your family is/are located?

   Yes _____ No _____

7. Does your school have a plan and facilities for meeting disaster?

   Yes _____ No _____

8. Will you help _____ learn the role of each member of the
   (Student)
   family in time of emergency?

   Yes _____ No _____

9. Do you think _____ study of disaster preparedness can be
   (student's)
   helpful to you and your family?

   Yes _____ No _____

INVOLVING CHILDREN IN CIVIL DEFENSE
UPPER ELEMENTARY GRADES

SAMPLE UNIT 2
PREPARING FOR SHELTER LIVING

10 to 14 class sessions

General Purpose: To prepare pupils for possible disaster by developing shelter living plans, skills, and attitudes.

Performance Objectives:

Gather and analyze data on need for home, school, and community shelter planning.

Make family plans for home and community shelter living.

Develop skills and attitudes needed for adapting to shelter living.

Suggested Activities:

1. Review disaster situations in the films listed at the end of this unit, through experiences of class members, and in current events.

2. Follow up a school fire drill or civil defense drill with a discussion of the need for such activities. Bring up such questions as:

   a. Why should we have fire drills at school and at home?

   b. Under what conditions should we have home shelters?

   c. What do we need to know to be prepared for emergencies?

3. Have three student committees survey:

   a. The school's civil defense program and shelter facilities.

   b. Various types of home shelters.

   c. The community's public fallout shelter facilities and alerting and warning system.

4. Visit a public fallout shelter in the company of the Civil Defense Director or the shelter manager. Review community shelter supplies before the visit. Note particularly protection factor, supplies, recreation and training needs, etc.

5. Locate community emergency supplies and public fallout shelters on a map of the community.

387-705 O - 70 - 3

6. Discuss with the class the role of individuals, families, and communities (including the school community) in time of disaster.

7. Plan a home shelter and list supplies for it.

8. Plan a program of children's activities for shelter living. Include books, games, and music; and assignment of responsibilities for activities and supplies.

9. Have children prepare their own "In Time of Emergency" handbook for school and home.

Evaluation:

1. Have students write acticles on shelter living for the school newspaper. Emphasize the role of the individual student in preparing for emergency in various situations -- on school bus, in class, in auditorium, etc.

2. Have the class plan a future lesson on "What I Need to Know To Be Prepared." This might include information about community helpers, first aid training, and various kinds of disasters.

3. Review with class the "Checklist of Emergency Action" in chapter 1 of In Time of Emergency, pages 6 and 7.

4. Have students write recommendations for improving their home, school, and community civil defense facilities and shelter areas.

5. Have a panel with questions prepared by the class visit another class and share information on preparing for shelter living in disaster.

6. Compile a list of definitions of man-made and natural disasters, as arrived at by the class.

Materials: See Appendixes III and IV for descriptions and information on procurement. Basic references preceded by o are supplied with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision.
   Chapters 1 through 6.

c. Publications and instructional aids supplied by the local civil defense agency and other government agencies concerned with governmental action in disaster situations.

d. State Department of Education-State Civil Defense Agency manual for schools.

2. Other References:

a. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

b. Community Involvement in Civil Defense, OCD/DOD. H-11-A. 1967.

c. Family Food Stockpile for Survival, USDA, Home and Garden Bulletin 77.

d. Realistic Approach to Civil Defense, A, AASA, NCSS, OCD, OCD/DOD. MP-36, 1966.

e. Fallout-Protected Schools, OCD/DOD. TR-41. 1967.

f. Status of the Civil Defense Program, OCD/DOD. April 1969.

3. Films:

a. About Fallout, DOD CD 3-220, color, 24 min. or Briefly About Fallout, color, 8:18 min.

b. Shelter on a Quiet Street, DOD CD 5-221, color, 24:02 min.

c. Sword and the Shield, The, DOD CD 20-230, b/w, 13:20 min.

4. Other Instructional Aids:

a. "Checklist of Emergency Action," Chapter 1, In Time of Emergency.

b. "Student Checklist for School Emergencies," Appendix I.

c. "An Outline for Family Emergency Planning," Appendix II.

d. Record or tape of Alert and Warning Signals (if locally available).

e. Clippings of newspaper and periodical articles, and pictures.

f. Diagram of school, showing the fallout shelter area.

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

To the Teacher:

Since the end of the Second World War, our Government has become increasingly aware of the need for a well-organized and coordinated civil defense program. Today all of the States and nearly every local community have functioning civil defense and plans to meet emergencies and disaster situations arising from either natural causes or from those of a man-made nature, including nuclear war.

The purpose of these suggested activities and lessons is to introduce basic civil defense concepts into the secondary social studies curriculum so that students may gain an understanding of the reasons for having a civil defense program, and responsible attitudes toward survival planning and training.

Social organization, civic responsibility, and interdependence are at the core of civil defense; civil defense concepts should therefore, fit well into social studies. Since most junior and senior high schools have courses in geography, American History, government, civics, and or problems of democracy -- or similar course offerings -- the teacher should be able to adapt the material presented in this outline to fit his particular needs as well as the needs and abilities of his students.

Junior high school course offerings in the social studies usually include geography, U.S. history and civics, all of which offer opportunities for the introduction of civil defense content and concepts. Since civil defense has local and State, as well as national functions, teachers should be able to incorporate various parts of this material into the existing course outlines.

Senior high school courses in world and American history, in geography, in sociology and economics, and in the various problems courses generally have units within which civil defense concepts can make a valid and useful contribution. Senior high students are, of course, better able to treat in greater depth and with more understanding the ideas behind the civil defense efforts and to evaluate those efforts in a meaningful way.

The ideas about civil defense that should be stressed are basic. Evaluation of the success or failure of this material should therefore depend on whether your students have come to an understanding of the purposes of the local, State, and national civil defense effort, and the part they can play in helping their community, their country and themselves.

The Major Principles of Civil Defense:

1. Each individual should understand civil defense organization and responsibilities -- national State, and local.

2. Each individual should be aware of local civil defense planning for his protection.

   a. Recognition and understanding of the Alert and Warning signals.

   b. Understanding of the purposes and operation of the Emergency Broadcasting System (EBS).

   c. Knowledge of particular local problems and plans.

3. Each student should have a basic understanding of the effects of natural and man-made disasters, including nuclear war.

4. Each individual should be prepared for emergencies through planning and training.

   a. Establishment of public fallout shelters and emergency centers.

   b. Training of personnel.

   c. Stocking of supplies in shelter areas.

   d. Understanding of the rules of shelter living.

   e. Need for cooperation in times of emergency.

Suggested Units or Sub-Units:

1. Research and report on the organization and operation of the civil defense agencies - national, State, and local, such as officials, duties, types of appointments; scope of operation; financing; major goals, both long-term and short-term.

2. Make a bulletin board display or posters on civil defense topics--emphasizing the local organization, plans, and operations.

3. Study the local civil defense program and the responsibility of the individual in an emergency (Sample Unit 1).

4. Study the potential problems of shelter living and the possible solutions to the problems (Sample Units 2 and 3).

5. Plan, sketch, or make a model of a home, school, or community fallout shelter. For the school, develop a plan within the existing building. For a public fallout shelter outside the school, locate a suitable building in the neighborhood and plan a fallout shelter.

6. Analyze and report on the local emergency operation plan.

7. Study the community organization and lack of organization in a simulated disaster situation (Sample Unit 5).

8. Have a committee investigate and report to the class on the local alerting and warning system and the Emergency Broadcasting System.

9. Get ready to cope with natural disasters (Sample Unit 4).

10. Conduct a class study of student response to the Alert and Warning signals, with the variable factors being time of day and location of the student at that time (simulation and role playing).

11. Have students survey their classmates to discover who has had first aid or other medical self-help training. Discuss on the basis of results whether or not such a course should be offered in the school, and in what subject areas.

12. On a map of the community locate public fallout shelters, indicating whether or not they are stocked. Locate other potential shelter areas. Research and then discuss the basis of determining radiation protection factors (Pf) and what makes a good shelter area.

13. On the basis of reading and study, discuss the purpose of civil defense.

14. Evaluate civil defense education and information materials (Sample Unit 6).

15. Have students write a short essay stating opinion, based on data, of the local civil defense accomplishments. Suggest improvements based on their study.

16. Have a group of students write and present a program to the PTA on local civil defense plans and action.

17. Conduct a simulated disaster or emergency situation and assess with the class the results. (You might wish to use the Community Response Game.) Stress the issue of interdependence (Sample Unit 5).

18. Have the class research and assess the school emergency plan.

19. Conduct a "Meet the Press" session with a local civil defense official in which the students ask questions about national, State, and local plans and procedures.

Materials:

See Appendixes III and IV for descriptions and information on procurement. Publications prefaced by o are supplied with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision.

   c. Publications and visuals supplied by local civil defense agency and other local government agencies that act in time of disaster.

   d. State Department of Education/State Civil Defense Agency manual for schools.

2. Additional References:

   a. Realistic Approach to Civil Defense, A. AASA, NCSS, OCD, OCD/DOD. MP-36. 1966.

   b. Committees for Community Shelter Planning, Brown, Davis S., OCD/DOD. H-11-B. 1966.

   c. Civil Defense Motion Picture Catalog, OCD/DOD. MP-6. June, 1970.

   d. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

   e. Community Involvement in Civil Defense, OCD/DOD. H-11-A. 1967.

   f. Community Response Game, Simulatics Corporation. 1967.

   g. Hurricane Dora, OCD/DOD. MP-50. 1964.

   h. Hurricane Carla, Treadwell, Mattie E., OCD/DOD. MP-32. 1961.

   i. Publications Index, OCD/DOD. MP-20. 1969.

   j. Fallout Protected Schools, OCD/DOD. TR-41. 1967.

3. Films:

   a. About Fallout, DOD CD 3-220, color, 24 min. or Briefly About Fallout, color, 8:18 min., DOD CD 3-256.

   b. Hurricane Called Betsy, A, b/w, 28:54 min., DOD CD 20-251.

   c. Operation Cue, DOD CD 20-232, (Revised 1964), color, 14 min.

d. Post Attack World, DOD CD 20-231, b/w, 14:30 min.

e. Shelter on a Quiet Street, DOD CD 5-221, color, 24:30 min.

f. Sword and the Shield, The, DOD, CD 20-230, color, 13 min.

g. Though the Earth Be Moved, DOD CD 20-238, b/w, 45 min.

h. Town of the Times, DOD CD 20-222, 26 min.

4. Other Aids:

a. Local county maps.

b. "Student Checklist for School Emergencies," Appendix I.

c. "Outline for Family Emergency Planning," Appendix II.

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 1
RESPONSIBILITY OF THE INDIVIDUAL IN EMERGENCIES

12 to 15 class sessions.

General Purpose: To understand the local civil defense program and the responsibility of the individual in emergencies.

Performance Objectives:

Gather and organize information about nation, State, and local government plans for meeting disasters, warning systems, shelter areas, and the types of possible disasters.

Analyze and understand the need for training programs, community, and home fallout shelters, school disaster plans, and proper response to Alert and Warning signals.

Develop attitudes of cooperation for survival and an understanding of the individual's responsibility for helping with disaster planning, and with carrying out the plans when disaster strikes.

Suggested Activities:

1. Have a committee or committees research and report on national, State, and local government organization and responsibility for civil defense action.

2. Study and discuss the local defense plan in class, and then invite someone from the local civil defense office to interpret the plan and answer questions about it.

3. Research and report on the types of disasters, including nuclear, to which there should be a civil defense response.

4. Evaluate the school's emergency plan and make recommendations to the principal concerning any needed revisions.

5. Prepare a demonstration of the Alert and Warning signals and discuss the proper response to each.

6. Select a space in the school for a fallout shelter. List all the factors involved in making the choice. If a fallout shelter exists, study the school's shelter space and the supplies in it and recommend any needed improvements.

7. Locate public fallout shelters on a map of your city, town or county.

8. Following study of public fallout shelters, visit a stocked community shelter with the shelter manager on hand to explain and answer questions.

9. Investigate and report on civil defense education and training programs and make recommendations to the class and parents regarding education and training for individuals.

10. Discuss the kinds of behavior you would encounter in a shelter. Discuss the roles young people can play in emergencies.

11. Have students survey their classmates' attitudes toward civil defense and discuss the findings.

12. Using personal experiences, newspapers, and news magazines as basic sources, have students report on the role of one individual in an emergency situation.

13. Discuss or write essays on emergencies that arose from a recent storm or other community disaster, and on individual action.

Evaluation:

1. Construct an objective test on basic civil defense terms, local civil defense plans, facts about fallout, alert and warning signals, and local shelter areas based on student questions.

2. Develop and conduct a program for your PTA on either the local civil defense program or your school's emergency plans.

3. Have the class write an essay on "A Twentieth Century Pompeii" -- an imaginary diary or log of a disaster occurring now, found a hundred years from now.

4. Out of class discussion draw suggestions as to other subject areas where the junior-senior high school curriculum could contribute to better preparation of students for emergency situations.

5. Conduct a survey of the knowledge about the attitudes toward civil defense, using a student-prepared questionnaire.

Materials: See Appendixes III and IV for descriptions and information on procurement. Basic references preceded by an o are supplied with this handbook.

1. Basic References:

o a. In Time of Emergency, OCD/DOD. H-14. 1968. Chs. 1-4, Part II.

o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Chs. 1,2,3,4,8.

c. Local civil defense plan and other materials provided by local civil defense agency.

d. State Department of Education/State Civil Defense Agency manual for schools.

e. Your school emergency plan.

2. Other Refernces:

a. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

b. Committees for Community Shelter Planning, Brown, David S., OCD/DOD. H 11-B. 1966.

c. Community Involvement in Civil Defense, OCD/DOD. H-11-A. 1967.

d. Hurricane Carla, Treadwell, Mattie E., OCD/DOD. MP-32. 1961.

e. Hurricane Dora, OCD/DOD. MP-50. 1964.

f. Realistic Approach to Civil Defense, A, AASA, NCSE, OCD, OCD/DOD. MP-36. 1966.

g. Schools Built With Fallout Shelters, OCD/DOD. TR-33. 1966.

h. Status of the Civil Defense Program, OCD/DOD. MP-46. (Issued annually).

3. Films:

a. About Fallout, DOD CD 3-220, color, 24 min. or Briefly About Fallout, color, DOD CD 3-256, 8:18 min.

b. Operation Cue, DOD CD 20-232, (Revised 1964), color, 14 min.

c. Sword and the Shield, The, DOD CD 20-230, b/w, 13:30 min.

d. Town of the Times, DOD CD 20-222, color, 26 min.

4. Other Aids:

a. Local county maps

b. "A Student Checklist for Family Emergency Planning," Appendix I.

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 2
HOME SHELTER AND SUPPLIES

5 to 10 class sessions

General Purpose: To develop interest in, and understanding of, the need for home fallout shelters, dual purpose shelters, and the supplies that should be stored in them.

Performance Objectives:

Gather and organize information related to the construction of home shelters.

Gather and organize information about the stocking of home shelters.

Develop home fallout shelter designs, and plan home shelter supplies.

Evaluate purposes and value of home and community shelters.

Suggested Activities:

If this unit is used independently of Unit 1 as a part of a larger social studies unit, it may be necessary to see that the class gets an overview of national, State, and local civil defense purpose, organization, and functions; and some knowledge of the kinds of disasters that make home shelters necessary. This background can be gained in many ways, for example:

a. Pupil or teacher pre-tests, followed by research and discussion.

b. Assigned readings and reports, by individuals or committees, on national, State, and local government organizations that meet man-made and natural disasters, and on things the family and the individual citizen need to know.

c. Gathering factual information on disasters--through films, newspaper and periodical stories and pictures, etc.

d. Inviting guest speakers, briefed ahead of time on the required information.

e. Having students submit questions and topics on the subject of the unit they would like discussed or answered. Prepare a master list of the topics and questions. Divide the class into groups to find answers to the questions and information on the topics of interest. Have these groups report to the class.

1. View together the films About Fallout and The Face of Disaster and discuss incidents that indicated the need for shelter.

2. Discuss with the class the various types of homes in your community and the types of shelters best adapted to each.

3. Have students plan a shelter for a typical local home, or have each student draw up plans for a fallout shelter in his own home. Make models.

4. Develop with the class a list of home shelter supplies and then compare with the list given in the Personal and Family Survival. Discuss differences, then have students draw up two lists: (1) essential home shelter supplies, (2) desirable home shelter supplies. Discuss why certain things are placed on one list or the other.

5. Discuss the relative merits of home and public fallout shelters and try to reach some conclusions about which would be better in your area and for your family and why. This could be a debate.

6. If possible, visit a home fallout shelter or have a model constructed to display in your school.

7. Study ideas for improvised fallout shelters, and decide on some to put together for school and home use. Make models.

8. Analyze the factors of home fallout shelters that have value for other disasters.

9. Have any or all of the above activities carried out by group or individual assignments. See the sample questionnaire on page 43.

10. Visit a home fallout shelter.

Evaluation:

1. Have pupils report on their activity in No. 9 above, followed by class discussion.

2. Give an objective test on home fallout shelters, including types of construction and necessary supplies.

3. Give students a drawing of a home and have them mark the areas best suited for shelter construction.

4. On a student-prepared listing of shelter supplies, have students mark those items essential and those desirable for home shelter stocking.

5. Have students debate the relative merits of home and public fallout shelters.

6. Evaluate the unit with a questionnaire. See Appendix VIII.

Materials: See Appendixes III and IV for descriptions and information on procurement. Basic references preceded by o are supplied with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968. Chs. 4-7.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Chs. 5, 9.

   c. Materials and instructional aids provided by local civil defense agency.

2. Other References:

   a. Family Food Stockpile for Survival, USDA. Home and Garden Bulletin 77.

3. Films:

   a. About Fallout, DOD CD 3-220, color, 24 min. or Briefly About Fallout, DOD CD 3-256, color, 8:18 min.

   b. Shelter on a Quiet Street, DOD CD 5-221, color, 24:02 min.

4. Other Instructional Aids:

   a. "An Outline for Family Emergency Planning." See Appendix II.

   b. Pupil-made shelter models.

   c. Home shelter visuals and models that may be provided by the local civil defense director.

PROJECT PLANNING QUESTIONNAIRE--HOME SHELTERS

Place a check in the appropriate space.

_____ I am interested in doing a project on home fallout shelters.

_____ I am <u>not</u> interested in civil defense, but would rather continue with other assignments.

If you are planning a project, answer the following questions:

_____ I plan to work alone.

_____ I plan to work with the following people: (list them below)

My work will be on the following topic or topics: (check one or more as appropriate)

_____ 1. home fallout shelters; planning and constructing.

_____ 2. comparisons of home and public fallout shelters.

_____ 3. the prices and practicalities of building dual-purpose fallout shelters and putting together improvised shelters.

_____ 4. the value, purpose, and multiple functions of fallout shelters.

_____ 5. provisions (supplies) in emergency shelters.

_____ 6. the social problems of living in home and public shelters.

_____ 7. simulated disaster situations (case studies) calling for shelter living, including problems encountered.

_____ 8. other_____

Explain in the space below how you will proceed with your project. What techniques will you use?

How should you be evaluated for your project?

_____ 1. oral report.

_____ 2. written paper or report.

_____ 3. experiment or interview.

_____ 4. visual designs (posters, etc.)

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 3
PROBLEMS OF PUBLIC SHELTER LIVING

5 to 10 class sessions

General Purposes: To understand the potential problems of living in public fallout shelters, and the possible solutions to those problems.

Performance Objectives:

Gather and analyze data on the possible problems of living in school or other public shelters.

Evaluate possible solutions and develop attitudes and values necessary for shelter living.

Suggested Activities:

See the paragraph under Suggested Activities in the Secondary Sample Unit 2 concerning the possible need for, and suggestions for developing, background information.

1. Introduce the unit with one of the films listed under Materials for this unit, and/or pictures of disaster situations.

2. Visit a community shelter with the Shelter Manager and have him explain organization and purposes.

3. Have each student make his own list of the problems he thinks would arise in a community shelter situation -- a large number of people confined for a long period of time in a small space.

4. Compare lists and classify problems. Assign groups of students to develop possible solutions to different types of problems; i.e., training, keeping order, rationing, sanitation, recreation, medical care.

5. Have each group report to the class its suggested solutions to its problem area. Discuss with the class.

6. Develop a class list of generalized rules governing conduct in a shelter.

7. Have students visit the school shelter area, or, if there isn't one, plan a school shelter area -- and in either instance make recommendations on shelter to the principal.

Evaluation:

1. Conduct a simulated disaster situation with the classroom as the shelter area. What would the students do, what rules would they make, what leadership would they choose, what committees would they form? How, in general, would they organize and plan to meet the problems of shelter living?

2. Have students write or speak on such subjects as:

   a. Problems you would have to face if you had to spend time in a community shelter.

   b. The changes that have taken place in your attitude toward civil defense and group behavior as a result of studying this unit.

   c. The role and responsibilities of young people in emergency situations, particularly in shelter living. Would youth pose a particular problem, as adults see it? Could young people contribute particular skills, as they see it?

Materials: See Appendixes III and IV for descriptions and instructions on procurement. Publications preceded by o are provided with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Chs. 4, 5 and 9.

   c. Realistic Approach to Civil Defense, A, AASA, NCSS, OCD, OCD/DOD. MP-36. 1966.

   d. State Department of Education - State Civil Defense Agency manual for schools.

2. Films:

   a. About Fallout, DOD CD 3-220, color, 24 min. or Briefly About Fallout, color, 8:18 min.

   b. Sword and the Shield, DOD CD 20-239, The, b/w, 13:20 min.

   c. Town of the Times, DOD CD 20-222, color, 26 min.

3. Other Instructional Aids:

   a. Local maps.

   b. Civil defense listing of public fallout shelters in the community.

   c. "A Student Checklist for School Emergencies," Appendix I.

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 4
NATURAL DISASTER READINESS

6 to 12 class sessions

General Purpose: To make students aware of the nature of natural disasters and civil defense measures taken to prepare them to meet such disasters, and to allay fear.

Performance Objectives:

1. Develop an awareness of the nature of natural disasters and the destruction that can result.

2. Know the responsibilities of the local civil defense agency and other agencies of local government in planning, organizing, and implementing programs to meet natural disasters.

3. Evaluate the planning of individuals, the family, and the community to meet natural disasters, and recommend changes.

Suggested Activities, sequentially developed:

1. Show film(s) listed at the end of this unit and/or pictures of natural disasters: tornadoes, hurricanes, floods, blizzards, earthquakes.

2. Discuss the visuals shown, noting particularly the nature of the havoc wrought and the protective measures taken. Personal experiences of class members and guest speakers who have experienced uncommon disasters like the Alaskan earthquake should be discussed.

3. Invite a member of the staff of the local Weather Bureau to speak to the class on how natural disasters are predicted, stressing those most likely to affect the local area. This might be done through a committee visit to the Bureau.

4. Break the class into five study groups, and assign studies of (1) tornadoes, (2) hurricanes, (3) floods, (4) blizzards, and (5) earthquakes. Give each group an information sheet discussing the kind of disaster the group is studying and the sheet on Public Responsibilities in a Disaster. See pages 49-54. Library study should supplement the information sheets.

   Suggested group activities:

   a. Define the natural disaster being studied.

   b. Make a class map of the United States, to show areas in which the natural disaster being studied is likely to occur.

c. Discuss the causes and effects of the designated disaster.

d. Prepare a list of measures to take to protect life and property from the designated disaster.

e. List things learned from personal experience of class members.

f. List protective measures common to nuclear disaster and the natural disaster being studied.

g. Using a tape recorder, have each group prepare a report to the class.

5. Have the class visit the local civil defense agency to learn how it functions in the face of natural disaster. A committee should arrange the visit in advance, stressing to officials that the class wishes information related primarily to the action of the civil defense agency in coordination with other agencies of local government in time of natural disasters.

6. Locate local public fallout shelters and visit one -- note what natural disaster would this shelter protect you from.

7. Learn the alert and warning signals -- for peacetime disasters, and for nuclear disaster.

8. Research the adequacy of school plans to meet natural disaster and make recommendations to the principal.

Evaluation:

1. Have the class prepare information sheets on natural disasters that might occur in the area, and on protection needed -- Do's and Don'ts.

2. Have the class prepare lists of the local emergency and relief agencies needed and available in times of disaster that are all coordinated by civil defense.

3. Have the class prepare lists of emergency supplies that should be kept in the home.

4. Give an objective test on natural disasters. See example on pages 55-57.

5. Have pupils fill out a questionnaire on the value of the unit, and discuss it together. See example on page 58.

6. Have pupils write essays on the question, "If you were at home and heard that a hurricane (or other natural disaster likely to occur in your area) was on the way, what would you do?"

Materials: See Appendixes III and IV for descriptions and instructions on procurement. Publications preceded by o are provided with this handbook.

1. Basic References:

o a. In Time of Emergency, OCD/DOD. H-14. 1968, Part II.

o b. Personal and Family Survival, OCD/DOD. SM 3-16. 1966 Revision. Chs. 4, 5, and 9.

c. Fact sheets issued to groups. (pages 49-54).

d. Materials provided by the local civil defense agency.

e. State Department of Education/State Civil Defense Agency manual for schools.

2. Other References:

a. Hurricane Carla, Treadwell, Mattie E., OCD/DOD. MP-32. 1961.

b. Hurricane Dora, OCD/DOD. 1964.

c. Realistic Approach to Civil Defense, A, AASA, NCSE, OCD, OCD/DOD. MP-36. 1966.

d. Tornado, U. S. Department of Commerce, ESSA.

e. Current news stories and pictures from newspapers and periodicals; and radio and TV broadcasts on natural disasters.

f. School and public library references such as encyclopedias and books about storms, etc.

3. Films:

a. Hurricane Called Betsy, DOD CD 20-251, b/w, 28:54 min.

b. Though the Earth Be Moved, DOD CD 20-238, b/w, 45 min.

4. Other Instructional Aids:

a. Pupil and teacher made transparencies on local weather patterns and developmental stages of storms.

b. Tapes of storm sounds.

c. Film: Tornado! - usually available from the local ESSA Weather Bureau, particularly in tornado areas.

FACT SHEET I

TORNADOES

Definition: A tornado is the most violent weather phenomenon known to man. A tornado is also called a "twister" and, incorrectly, a "cyclone." It is a small storm that usually appears as a funnel-shaped cloud rotating rapidly and tapering toward the ground, within which wind velocities have been estimated at speeds up to 500 miles per hour. Generally, its path covers only a small area, being usually no more than 1/4 mile wide and from 15 to 20 miles in length. However, tornadoes have been observed having a width of one mile and up to 300 miles in distance on the ground. Normally, the tornado lasts only a short time as it moves forward at approximately 25 to 40 miles per hour. Generally, tornadoes move from southwest to northeast, but some have been known to travel in other directions.

Where They Strike: Tornadoes may strike any part of the United States. All of the adjoining 48 States and the District of Columbia have felt the fury of these storms at one time or another. The areas most likely to be stricken, however, lie within the central part of the United States.

When They Strike: The time of day most favorable for tornadoes is from noon to midnight; it is during this period that 82 percent of the observed and reported tornadoes have occurred. They may strike, however, at any hour. At any given school location within the ground path of a tornado, the storm will strike and move on in the space of one or two minutes. But hazards created by the resulting storm damage may continue. Walls left standing in a dangerous condition or broken electrical power lines lying on the ground are threats as long as persons are exposed to them. Even a school building which is unoccupied at the time a tornado strikes can thus become an emergency situation when curious onlookers and workers gather after the storm. Pupils particularly are likely to be excited, emotionally disturbed, and interested in salvaging what they can from the debris. The emergency continues until the school administration, the teachers, or civil authorities establish adequate safety zones and security measures about the premises.

FACT SHEET II

HURRICANES

Definition: Hurricanes are tropical cyclones that form near the Equator. They form over all of the tropical oceans except the South Atlantic, but not over the continents. In the western North Pacific Ocean, they are known as typhoons; in the Bay of Bengal and the northern Indian Ocean, as cyclones; in the South Pacific, eastern North Pacific, southern Indian and North Atlantic Oceans (including the Gulf of Mexico and Caribbean Sea), they are known as hurricanes. Hurricanes in Australia are sometimes called willy-willys and the typhoons of the Philippines, Baguios. All are of the same general character and, as a class, are known as tropical cyclones.

The hurricane is the most powerful of all storms. Wind velocities must reach 74 miles per hour or higher before a disturbance can be called a hurricane. Although this velocity is considerably less than that of a tornado, the hurricane is a much larger storm and affects an area for a much greater time period. The diameter of a hurricane varies greatly. In some cases, it is not more than 50 to 75 miles; but in the majority of cases the diameter is greater, and in many instances has exceeded 500 miles as compared to 1/8 to one mile diameter of a tornado. Furthermore, the hurricane may carry its destruction over a path many hundreds or even thousands of miles in length; whereas tornadoes usually travel from 15 to 20 miles, with a maximum of nearly 300 miles.

Where They Strike: Hurricanes form over tropical oceans where there is an abundance of moisture in the warm air. The Atlantic Ocean, the Caribbean, or the Gulf of Mexico is the birthplace of practically all of the hurricanes that affect the United States, although a few will form in the eastern Pacific off the Central America coast and move west or northwestward. These seldom reach the California coast, but have affected Hawaii. Hurricanes generally move toward the west at first, and then curve gradually northward. Following this course, hurricanes strike the United States along the coast of the Gulf of Mexico or the Atlantic Ocean. Hurricanes moving inland from the Atlantic Ocean have ranged from the southern limits of Florida to as far north as the New England States. Hurricanes usually weaken and dissipate before traveling far inland; but they can cause severe inland floods because of the heavy rains they bring. Thus, it is the coastal areas from Texas to Florida and from Florida to New England which face the greatest threat of hurricane disaster.

When They Strike: Hurricanes are most likely to strike from late summer to early fall in the western hemisphere. When the storm appears to be 30 to 36 hours away from the United States, a "hurricane watch" is announced. A "hurricane warning" is issued when winds reach 74 miles per hour, or dangerous high water or rough seas are expected in the specified coastal area within the next 24 hours.

FACT SHEET III

FLOODS

Definition: A flood is defined as water that covers land not usually under water. Floods destroy property, disrupt normal activities and services, carry away topsoil and crops, and endanger life. While lakes, seas, and oceans sometimes flood coastal areas, most floods are caused by rivers overflowing their banks. The damage stage of a flood is usually reached when the river's banks are full and the overflow begins to cover the flood plain. Flood plains may be very narrow in mountainous regions or miles wide where a river's course is through flat lands. Sometimes floods are beneficial, as in the case of the Nile River and in the rich soil deposited in the delta regions of many rivers. Despite modern methods of prediction and warning, floods still constitute major disaster threats for many parts of the world and for millions of people.

Where They Strike: All low-lying coastal areas near large bodies of water and the land near rivers are subject to flooding at almost any time. The entire United States east of the 90th meridian is subject to periodic floods. The Mississippi-Missouri River system and its feeders, for example the Ohio, often cause major floods that cover millions of acres of land. Floods are not uncommon in New England, along the entire Atlantic Coast (especially in hurricane season), in the Far West, and along the Gulf Coast. Losses from floods in this country average $300 million each year. Flash floods caused by heavy rains or sudden thaws may even effect normally dry areas such as the Southwest and the Rocky Mountain States. Despite flood control efforts, such as planting trees in watersheds, and building reservoirs, no area near a large river can be made completely flood proof.

When They Strike: The usual causes of river floods include too much rain at any one time and the rapid melting of ice and snow. Floods from seas or lakes are usually caused by winds piling up water against the coast line (see Fact Sheet II on hurricanes), and occasionally by earthquakes or volcanic eruptions, which may cause tidal waves. Therefore, times of heavy rainfall, the spring thaw, and the hurricane season often produce floods. The U. S. Weather Bureau issues flood warnings for more than 1,000 places in the United States and uses radar to spot heavy rain areas that may cause flash floods.

FACT SHEET IV

BLIZZARDS

Definition: A blizzard is a winter storm which brings extremely cold weather, strong winds, and blowing snow. Temperatures may fall 10 to 20 degrees per hour, reaching lows of 20 to 30 degrees below zero. Winds of 50 to 60 miles an hour may fill the air with fine, powdery snow that create deep snowdrifts, and reduce visibility to a minimum. Persons caught outside by the storm may even find difficulty in breathing. The snow which is driven by the wind may be falling from a cloud, or it may be that which is picked up from earlier snowfalls.

Where They Strike: Blizzards generally form in the Rocky Mountain and Plains States of North America where there is an abundant supply of cold air during the winter. They are usually produced when cold, polar air is drawn into active low-pressure disturbances. Conditions favorable to the occurrence of a blizzard can be forecast quite accurately. The onslaught of a storm may be sudden, however, and its ferocity may increase rapidly.

Lands which lie westward from the Great Lakes are most likely to be stricken. This area includes the states of North Dakota, South Dakota, Minnesota, Wisconsin, Iowa, Nebraska, eastern Montana, and eastern Wyoming. Blizzards may strike anywhere within the Plains States and Middle West, however, and as far southward as Texas. They are rare in the Northeast, and virtually unknown in the Deep South and Far West, except in the highlands. Heavy snowstorms are a threat from the Great Lakes eastward, however, and cold waves may reach as far southward as the Florida peninsula.

When They Strike: Late fall through the winter and into early spring.

FACT SHEET V

EARTHQUAKES

Definition: An earthquake is caused by a sudden displacement within the earth. Displacement at relatively shallow depths may be caused by volcanic eruptions, or even by avalanches. The resultant earthquakes are usually light and do little damage. Strong and destructive earthquakes usually result from the rupturing or breaking of great masses of rocks far beneath the surface of the earth. The ultimate cause of these deep ruptures has not been established.

Where They Strike: Two-thirds of all earthquake activity in the United States has occurred in the Pacific Coast States and nearby portions of Nevada. Within this region, the area of greatest earthquake frequency is in the Coastal Ranges of central and southern California, extending from the San Francisco Bay area southeastward to the vicinity of Los Angeles. Elsewhere along the Pacific coast, earthquake activity is relatively great along the coast of Northern California and in the Puget Sound lowland of the State of Washington.

Within the States of the western interior, a zone of earthquake activity extends from Montana southward into northern Arizona. The central part of the United States is not an area of great earthquake frequency. The greatest concentration of shocks has been in eastern Missouri and nearby States. In the eastern United States, earthquakes have been scattered widely, and most have been only minor.

Alaska has many earthquakes, especially in the south. The major earthquake belt in Alaska extends through the Aleutian Islands, the Alaska Peninsula, and into the Kenai Peninsula, and it extends inland several hundred miles to Fairbanks.

When They Strike: It is not yet possible to forecast an earthquake, to any useful degree. Seismologists are well aware of the areas where earthquakes are likely to strike, but are generally unable to predict the day, week, or even the month when an earthquake will strike.

FACT SHEET VI

PUBLIC RESPONSIBILITIES IN A DISASTER

In any disaster, there are certain things the public should do and others they should not do. The following points are "Rules of Conduct" in a disaster:

1. Warning, Information, and Advice

The public must learn to rely on the public information media for official warnings and authoritative information. Each individual has a personal responsibility to himself and his community to keep informed and to follow any directions given. Because of the possibility of electricity being disrupted, a battery-operated radio is an important part of every family's emergency equipment.

2. Use of the Telephone

Indiscriminate use of the telephone can seriously hamper disaster operations. Telephone switchboards designed to handle the calls of a normal day quickly become jammed during an emergency. Telephones should be used to report emergency incidents and situations, and not as a personal source of information.

3. Movement into a Disaster Area

One of the problems noted in virtually all disasters is the mass movement of people, messages, and supplies toward the disaster-struck area. This convergence greatly magnifies and complicates control measures and retards organized relief efforts. The problem of controlling people who move into a disaster area is made more difficult by the fact that some people have a valid reason for being there and others do not. These people have been divided into five major types, according to their motivation for going to the scene of the disaster. They are:

a. The Returnees -- The returnees are those persons who were evacuated or were absent at the time of the disaster.

b. The Anxious -- The anxious are those people who are concerned about friends or relatives in the disaster area.

c. The Helpers -- The helpers are the formal relief and control agencies and many volunteers who move into the disaster area to assist local authorities.

d. The Curious -- The curious are the sightseers or spectators who converge on a disaster area.

e. The Exploiters -- The exploiters are the people who move into a disaster area solely for the purpose of private gain from looting, profiteering, etc.

Suggested Objective Test on Natural Disasters

A. Multiple-Choice Questions:

Directions: Draw a line under the correct answer.

1. Tropical cyclones that form near the Equator are called (1) blizzards (2) floods (3) tornadoes (4) hurricanes.

2. The small storm that usually appears as a funnel-shaped cloud is known as (1) hurricane (2) earthquake (3) tornado (4) blizzard (5) flood.

3. When there is a sudden displacement within the earth, the result is called a/an (1) flood (2) earthquake (3) hurricane (4) blizzard (5) tornado.

4. The most powerful of all storms is the (1) flood (2) hurricane (3) tornado (4) earthquake (5) blizzard.

5. The storm that usually travels westward at first and then curves gradually toward the north is the (1) flood (2) hurricane (3) earthquake (4) blizzard (5) tornado.

6. The greater part of the United States is free from (1) earthquakes (2) blizzards (3) tornadoes (4) hurricanes (5) floods.

7. It is not yet possible to forecast to any useful degree when the following may strike: (1) tornado (2) hurricane (3) earthquake (4) flood (5) blizzard.

8. The Atlantic Ocean, the Caribbean, and the Gulf of Mexico are the birthplaces of practically all of the (1) earthquakes (2) hurricanes (3) blizzards (4) floods (5) tornadoes. (In the United States).

9. The most violent weather phenomenon known to man is the (1) earthquake (2) hurricane (3) flood (4) blizzard (5) tornado.

10. The storm that usually forms in the Rocky Mountain and Plains States of North America, where there is an abundant supply of cold air during winter, is the (1) hurricane (2) tornado (3) flood (4) blizzard (5) earthquake.

B. Completion Questions:

1. _____ are the two "standard" emergency signals that have been adopted in _____ most communities.

2. _____ is a 3-5 minute wavering sound on the sirens, or a series of short blasts on sirens, whistles, or other devices.

3. _____ is a 3-5 minute steady blast on sirens, whistles, or other devices.

4. _____ is used to warn of a natural disaster or other emergency.

5. _____ means that actual attack against the United States has been detected.

6. _____ travels 25 to 40 miles per hour.

7. _____ travels at least 74 miles per hour.

8. _____ is a body of water covering land that is usually not under water.

9. _____ is most likely to strike from late summer through the fall in the western hemisphere.

10. _____ usually occur when cold polar air is drawn into active low-pressure disturbances.

C. True-False Questions:

Directions: Indicate whether the sentences are T (true) or F (false) by placing a circle around the correct answer.

T - F 1. When a Tornado Warning is issued, take shelter within the next 2 hours.

T - F 2. If you are driving an automobile when an earthquake occurs, you should immediately stop the car and leave.

T - F 3. If you are outside when an earthquake occurs, remain outside.

T - F 4. If a tornado is sighted and your home has no basement, take cover under heavy furniture.

T - F 5. Drive away from a tornado's path at a right angle if you are in open country.

T - F 6. When a tornado approaches, it is safe to remain in a trailer or mobile home.

T - F 7. During a disaster, one should travel faster than road and weather conditions permit in order to save time.

T - F 8. If you are caught in a blizzard, it is not necessary to seek refuge since it is only a snowstorm.

T - F 9. During a blizzard, if there is no house or other source of help in sight, do not leave your car to search for assistance.

T - F 10. If you are walking when a tornado approaches, take cover and lie flat in the nearest depression such as a ditch, culvert, excavation or ravine.

(Example)

EVALUATION QUESTIONNAIRE FOR STUDENTS

1. What do you think was the purpose of studying about natural disasters and civil defense?

2. What is your opinion of the films you saw?

   a. Hurricane Called Betsy.
   b. Though the Earth Be Moved.

   Were they interesting?

   What made them interesting?

   From the films, what did you learn about natural disasters?

3. Was this study of natural disasters and civil defense interesting and helpful?

   If so, why?
   If not, why not?

4. What was your opinion of the study groups on natural disasters?

   Did it help you? - How?
   If not, what would you suggest?

5. Do you think this unit was worth studying?

   a. If yes, why was it worth it?
   b. If no, why was it not worth it?

6. Would you recommend this study being used in other classes and schools?

   a. If so, why?
   b. If not, why not?

7. Is the book, <u>In Time of Emergency</u> a good book to use in this study and to have in your home?

   a. If so, why is it good?
   b. If not, why not?

8. When this unit was introduced, you were given a general purpose and three specific purposes. Go over each purpose and describe how it was fulfilled.

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 5
ORGANIZING FOR AN EMERGENCY

10 to 15 class sessions

General Purpose: To develop in students through a simulated disaster situation a change in attitude and behavior leading to planned and reational action in any community disaster.

Performance Objectives:

When presented with the simulated disaster situation, the student will demonstrate his ability to make decisions.

The student will interpret through discussion the decisions he made and how they affected him, his family, and his community.

The student will compare his experience in the simulation to the responsibilities and decisions of citizens in his community.

The student will define the responsibility of civil defense to his community.

Suggested Activities: (Sequential)

1. Review with the students the functions of the individual in society and the role of the family in normal times and in times of crisis. To stimulate discussion of the roles of the individual in a community crisis you might use a pretest. See pages 65-68 for an example.

2. Play Phase I of the Community Response Game or set up role-playing activities which show the frustrations, choices, and responsibilities that arise in a disaster.

   The Community Response Game simulates some of the problems with which individuals are faced when a community is hit by a disaster. Each player is given a role in the simulated community. This role includes the player's location at the beginning of the game, his relatives and friends in the community, his job, and--eventually--such special obligations or interests as appointments to keep or property owned. At the beginning of the game, players are informed that a disaster has occurred in an unspecified part of the town. Each player has certain anxieties (specified in his role card) about the fate of the persons and things he cares for. To reduce these anxieties, the players may try to find out what happened by asking people they meet, by listening to radio broadcasts, by telephoning relatives, friends, or official agencies, or by getting to the disaster area. In the course of these actions, the players will experience road and switchboard jams, if they

occur, as a direct result of their behavior. Similarly, they will face the fact that the public agencies function only if persons (players) who are in charge perform their duties.

When the players gather reliable information on location of the disaster area and extent of damage, community organization becomes imperative. If the community cannot organize itself quickly enough or efficiently enough, the disaster spreads.

The Administrator's Manual which accompanies the Community Response Game must be studied before the game is used. In this unit it is suggested that the function of the anxiety phase and its scoring be ommitted.

For a suggested explanation of the game--to be used as a handout to students, followed by discussion--see pages 69-71.

3. Consider the complications created by student decisions, made while playing the game, or while role-playing. List the problems on a chalkboard and encourage the class to compare the reasons for indecision, such as: the inability to communicate and organize, personal anxiety about family members, changing roles (A policeman must be a policeman first; a husband and father second), and the role of community organizations in time of emergency.

4. Use a student as recorder to keep a list of words learned or newly understood from the discussions, and have the class develop workable definitions of the terms.

   Suggested List:

   a. Anxiety
   b. behavior
   c. catastrophe
   d. chaotic
   e. community
   f. Contingency
   g. crisis
   h. disaster
   i. emergency
   j. role
   k. simulated

5. Divide the class into committees to inventory the local agencies' roles and responsibilities. (The students have played the parts of the officials of these agencies while playing Phase 1 of the Community Response Game.) Use such techniques as interviewing local departmental heads, inviting local resource personnel in for classroom discussions, and visiting local agencies to review functions. Provide opportunity for discussion and summarization of findings, talks, and trips. Make it clear to the students that step 6, "Cumulating Activity" depends on the quality of their inventories.

6. Cumulating Activity:

a. Materials:

(1) For students

(a) 8-1/2 x 11-1/2 topographical grid maps of your county and city, or a combined county/city grid map.

(b) "Students' Community Readiness Rating Form." See page 73 for a sample.

(2) For Teachers:

(a) County and city grid maps or a combined county/city grid map.

(b) Clear overlay (s) to be used with grease pencil.

(c) "Teacher's Community Readiness Rating Form (Master)". See page 72 for a sample.

(d) Large combined county/city map for the bulletin board.

b. Utilization:

(1) From student inventories done in Activity 5 above, plot on the clear overlay (s) the location of local facilities that must function in an emergency. A group of students may wish at the same time to plot a bulletin board Master Map with labeled stick pins.

(2) The students will then list in the left-hand column of their "Student Community Readiness Rating (C.R.R.) Forms" facilities located on the county/city maps.

(3) They will then arrive at criteria with which to evaluate the plans of their community facilities for meeting emergency situations. The student (s) who reported on a facility must assign a numerical score to the facility according to the C.R.R. scale, stating on what basis the score was assigned. Each square must be assigned a score. The teacher will give students the explanation of rating criteria from her master C.R.R. Form.

Example: Students Community Readiness Rating Form (C.R.R.)

387-705 O - 70 - 5

	Criteria				
	Equipment	Plan of Emergency Operation	Staff	Plan staff and equipment	
Facilities					Scoring total
Hospital	+5	+5	+3	+4	+17

(4) Following individual ratings and discussion, the class will summarize atings on the "Teacher's Community Readiness Rating Form (Master)"

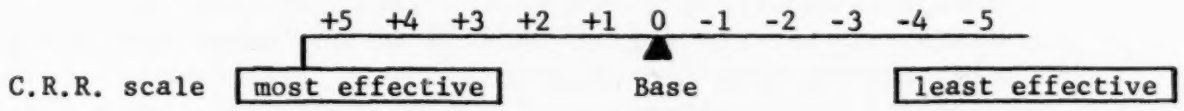
Example

	Criteria				
	Equipment	Plan of Emergency Oper.	Staff	Plan Staff and Equipment	
Facilities					Scoring Total
Police	+5	+5	+5	+5	+20
EOC	-5	+5	-5	-3	-8
Hospital	+5	+5	+3	+4	+17

Community total: +29

Maximum C.R.R. possible in this example: +60

Note: The sum of all community facilities interviewed or reported on at maximum effectiveness is the perfect C.R.R. score of _____ (20 times the number of existing and desirable facilities = perfect C.R.R.).



(5) Groups which talked with, or visited, officials (Activity 5) should pay a return visit--or send a tactful member of the group--to discuss their ideas for improvement.

7. Have a committee prepare a bulletin board display, charting responsibilities of the local civil defense program.

Evaluation:

1. Discuss with students what they think they have learned from this study, and develop suggestions for teaching this unit next time.

2. Have students define the responsibility of civil defense in the community by listing the procedures of civil defense. Develop this list into an essay entitled "Our Community Plans for Survival," showing student understanding of civil defense plans in the areas of readiness, execution, and reconstruction.

3. Reapply Phase II of the Community Response Game, and observe and then discuss and analyze behavioral changes in self, family, class, school, and community.

4. Have a student-planned role-playing session on behavior in an emergency and conduct a student evaluation of decisions made by the role players.

Materials: See Appendixes III and IV for descriptions and information on procurement. Publications marked o are provided with this handbook.

1. Basic References:

   a. Community Response Game, Simulatics Corp., 16 E. 41st Street, New York, New York 10017.

   o b. In Time of Emergency, OCD/DOD. H-14. 1968.

   o c. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Chs. 8 and 9.

   d. Publications and information about the local emergency operations plan provided by the local civil defense agency.

   e. State Department of Education--State Civil Defense Agency manual for schools.

2. Other References:

   a. Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

   b. Community Involvement in Civil Defense, OCD/DOD. H-11-A. 1967.

3. Films:

   a. About Fallout, DOD CD 20-220, color, 24 min.

   b. Sword and the Shield, The, DOD CD 20-230, b/w, 13:20 min.

   c. Post Attack World, DOD CD 20-231, b/w, 14:40 min.

SUGGESTED PRETEST-ORGANIZING FOR AN EMERGENCY

Desired Behavior

The Community Response Game should develop skill and ability to be effective in an emergency. Players consider what happens in a community crisis because of:

1. Communications problems.
2. Organizational problems.
3. Survival tasks.

The game demonstrates the need for accurate information and planning in areas of:

1. Community cooperation.
2. Community organization.
3. Community preparedness.
4. Individual anxieties and anxiety conflicts.

Test

Students or groups taking this test should check answers together to find out why each individual chose his answer. Then they should discuss briefly whether this is the best answer. Rank the answers and score on a +1, 1, -1, 0 scale. After playing the game, you may want to retest, discuss, and rescore to help determine what you learned from the game.

1. What would you do if the lights went out?

   A. Light a candle and go on with your knitting.

   B. Hop in your car and go see where the action is.

   C. Call the airport to see whether your daughter can still elope to Mexico.

   D. Turn on your portable radio to see whether your help is needed to provide volunteer ambulance service.

2. After a city gas tank explodes, you...

   A. Rush to your car and drive away.

B. Rush to your car and join the spectators.

C. Call the Fire Department to find out what happened.

D Turn on your radio or TV set to get recommendations for action.

3. When the Red Cross appeals for supplies for the victims following a a disaster, you:

A. Pile the kids' old toys into the pickup and take them to the Red Cross office.

B. Get out last season's outgrown clothes and haul them to the Red Cross office.

C. Call the Red Cross office and ask what to do with the blankets and kitchen equipment you are contributing.

D. Get together the blankets and equipment and take them down to the disaster area to give to a victim.

4. You have just gotten word that a tornado is on the way through the area where you live. The school where your children are is in its path. You load your car with stuff from your house and head toward the school to pick up your children. You are caught in a traffic jam of other worried parents. Your threadbare tire gives up. When the police try to get the traffic cleared up, you...

A. Break down and cry.

B. Help the police find a way to get your old wreck out of the way.

C. Insist on your right to be on the road.

D. Abandon your car and run back home.

5. After the tornado warning was given in your area and your neighbor took off in her loaded car, your wife called from the health clinic to see whether you felt well enough to get yourself and the baby into the cellar, assuring you that she was still at the local clinic. You use your last five minutes...

A. Taking all the refrigerated food to the cellar so you won't starve.

B. Putting new batteries into your transistor radio.

C. Going over to the moved-out neighbor's house to help her invalid father-in-law into your cellar.

D. Folding another dozen diapers so your baby will be nice and comfy.

6. An airplane flies into the office building where your husband works, causing explosion and fire. You son is making his first solo flight. The grandchild you are babysitting is crying for a bottle and a change. A fire truck comes clanging up to your apartment building. You...

   A. Take a double shot to calm your nerves.

   B. Collapse in despair and wait for what will be, to be.

   C. Dampen a blanket, pick up the baby, and head for the fire escape.

   D. Open the door and run out of the apartment.

7. From the coffee shop on the ground floor of the burning building you (the husband) try to call your wife so she will know your son's solo flight was scrubbed, and to let her know you will be working at your civil defense job at an emergency first aid station. The telephone lines are dead. You spot a policeman entering the building, so you...

   A. Identify yourself as an emergency worker and see if the policeman can turn in your report to the Civil Defense Communications Center.

   B. Identify yourself and try to get the policeman to escort you to the first aid station.

   C. Ask the policeman to radio your report to the TV station.

   D. Tell the policeman to go to your apartment to see that you wife and grandson are all right.

8. What would you do if the air raid siren sounded the attack warning signal right now?

   A. Take a good look at the test answers on the next desk while the other students are jamming the doorway.

   B. Follow your teacher to the assigned area and follow further instructions.

   C. Wait until you get official instructions over the intercom.

   D. Rush to the head of the lineup for the telephone to call your father so he can come get you.

9. What would you do if the air raid siren sounded an attention or alert signal on Tuesday afternoon at 4:30?

   A. Turn around and go back to school.

   B. Get to the nearest basement fast.

C. Look for that little CD card and read it.

D. Know the signal and follow your local emergency plan.

10. Your teacher told you to find and list emergency agencies in your area, so you...

A. Look in the civil defense material in your school library.

B. Forget it -- the teacher can't scare you into homework.

C. Call your local police station and ask.

D. Get the list from the class grind.

11. To assure effectiveness of your community CD plan, you should be one of many who...

A. Know the regular jobs of public agencies.

B. Know the emergency job skills of public agency workers.

C. Know how to perform at least one public emergency job well.

D. All of these.

12. You read in today's paper that a civil defense class will be held in your high school for the next six Monday nights. You...

A. Can't go to the class because you'll miss your favorite TV program.

B. Decide to go so you can see if your home shelter is really adequate.

C. Call your Monday Club friends and offer to drive them along with you.

D. Call your card club friends and ask if they want to go.

Playing the COMMUNITY RESPONSE GAME (for 5 to 16 players, or teams)

Object:

To use given units of energy to perform jobs and thereby reduce anxieties when disaster strikes the community.

The winner is selected by all players from the three who have the lowest number of anxieties at the end of the game. He is to be selected on the basis of his service to the community. The game ends when one player reduces his anxieties to zero, or at the end of a specified number of rounds (or at the end of an agreed time).

Equipment:

Each player starts with at least one scorepad.
Information on his scorepad about the location of pawns is to be kept secret except to those who establish contact with his player pawns.

Scorepads numbered 1, 2, 3, 4, and 6 must be given to different players. The remaining eleven pads may be given out in any combination that will make the game interesting.

For each scorepad, the player has one green direction card, one set of playing rules, and one typed locations card.

Also: 1 player pawn
5 family pawns (up to 4 to use, plus 1 for color identity)
1 telephone call card.

Special pieces called for in job performance.

Card 1 - 2 blue radio cars
Card 2 - 2 red fire trucks and 1 locator card
Card 3 - 3 green cars and 1 locator card
Card 4 - 2 yellow ambulances and 2 walkie talkies
Card 6 - 1 phone information dial, 10 red markers for phase I, and 6 yellow markers for phase II

Also controls the playing board so he has:
1 instructional manual, and 1 typed index.
1 rules of the board card.
1 list of players and anxieties from the scorepads.

PLAYING BOARD: The playing board is a 32-grid map of the community that has been hit somewhere by an unknown disaster. Each grid is a cover concealing the action of previous players. The community is divided by a creek north to south (corner to corner). The creek is crisscrossed with roads leading to places where anxieties can be reduced. Players move along these roads, which are separated into steps. Each step along the road normally uses one unit of energy. (See green sheet for exceptions.) The disaster produces unforseen problems.

Each player takes a turn on the playing board, to record his move for the round. The board action should not be seen by other players except the telephone company manager, who controls the game board as part of his duty of directing the game.

After the players have put their personal anxiety pawns under their suitable grids, the director will place six red disaster markers under contiguous grids. The director will see that players follow traffic rules set up and pasted inside the lid of the game board.

In order to talk to other players (which must be done privately), the players establish contact by:

1. Meeting another player--or players--in a grid of the game board, or

2. Completing a phone call to an operational agency (which uses one energy unit and might not go through--the telephone company manager spins his dial to see whether a line is clear during the round being played.) or

3. Listening to a radio or TV (but the players cannot talk back to these broadcasts).

Unless otherwise noted on the green direction sheet, each player may use up to 10 units of energy during each round (or turn).

Anxieties are reduced as duties are performed. These duties fall into three conflicting groups--personnel (4), job (1), and community responsibilities (1) with a total of 25 anxiety points. The player must decide how much energy to spend on each anxiety and which duties to perform first.

When the player decides what moves to make, he records these on his scorepad, then takes his pad to the playing board to play his round.

Anxiety points are listed for each round on your scorepad. They are listed in six areas--four personal problems, one job, and one community responsibility. They may be removed by:

1. Moving to a location where one's relative or property is.

2. Completing a phone call to find out that everything is all right.

3. Reaching the high building or the tower to see that everything is all right.

4. Being informed by radio that everything at the location of that anxiety is safe.

5. Meeting a player (because he is in the same grid with you) who has accurate information that parts of town not hit contain an object or objects of one's anxiety.

   Meeting ECO (card) or EOV (card) who has accurate information, etc.

Meeting police car (card 1).

Meeting fire truck (card 2), etc.

Meeting Public works truck (card3), etc.

6. Transporting members of your family from the disaster area in an ambulance.

7. Performing one's job or one's community task.

After the fifth round, the director may use the four remaining red markers to spread the disaster into further contiguous grids. He then announces the disaster has spread. Players should read on the green sheet about how this affects play.

(Example)

TEACHER'S COMMUNITY READINESS RATING FORM (MASTER)

	CRITERIA				
	EQUIPMENT	EMER. PLAN OPER	STAFF	PLAN STAFF AND EQUIP.	
FACILITIES					**SCORING TOTAL**
Police Station					
EOC					
Telephone Co.					
Red Cross					
CD Shelters					
Radio					
Television					
Utilities					
Public Works					
Fire Dept.					
Gas Station					
Ambulance					
Hospital					
Coast Guard					
National Guard					
Sheriff's Dept.					
Scouts					
Civil Air Patrol					
Telegraph					
Amateur Radio Op.					
Trains					
Commercial Bus					
Aircraft					
Ships					
Service Organ.					
				Community Total:	
				Maximum C.R.R. Possible:	

NOTE: Explanation of Criteria:

EQUIPMENT: The necessary tools for meeting an emergency.

PLAN OF EMERGENCY OPERATIONS: A contingency plan to meet an emergency.

STAFF: Qualified personnel (i.e., prbfessional, volunteer) who whould be available and have been trained for specific responsibilities in an emergency.

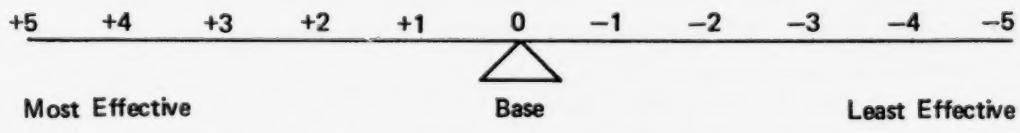
PLAN, STAFF, AND EQUIPMENT: All factors are in a state of readiness.

(Example)

STUDENT'S COMMUNITY READINESS RATING FORM

	Criteria				
FACILITIES					SCORING
				Community Total:	
				Maximum C.R.R. Possible:	

NOTE: The sum of all community facilities interviewed or reported on at maximum effectiveness is the perfect C.R.R. score of _____ (20 times the number of existing and desirable facilities = perfect C.R.R.).



THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 6
CIVIL DEFENSE EDUCATION AND INFORMATION

6 to 15 class sessions

General Purpose: To analyze the purpose and effect of Office of Civil Defense publications intended to inform the public.

Performance Objectives:

Gather and organize information about, and examples of, current civil defense information and education publications and other media.

Develop understanding of the purposes of these publications and other media.

Analyze the impact and effectiveness of civil defense information and education materials and efforts in the community, and recommend improvements.

Suggested Activities:

1. Give pretest (see page 76) on civil defense fact and fiction to be restudied at end of unit.

2. Have students as individuals or committees gather civil defense printed materials, examine and summarize their content, and investigate how they are used in the local and State civil defense programs. This might involve various research techniques--including interviews, surveys, and letter writing to local, State, and national civil defense offices for information.

3. Have a class or committees evaluate these materials in the light of their objectives and accuracy, insofar as it can be determined within the limited time for research.

4. Have a committee view civil defense public information films available from the local civil defense agency. Select some for showing to the class. Class members should evaluate the films through use of committee-prepared questionnaires.

5. On the basis of the material and information gathered, develop with the class a series of hypotheses or generalizations about the goals and purposes of the civil defense national and local programs.

6. Re-examine some of the civil defense materials in relation to the hypothetical goals, and modify the tentative generalizations as needed. Base changes and final statements on hard data and be able to document.

7. Survey the school, neighborhood, or local jurisdiction as to citizens' knowledge of civil defense, and assess the effectiveness of civil defense education and information programs. Use a pupil-prepared questionnaire.

8. Arrange for a civil defense official to visit the class, or delegate a group of students to visit him at his office. The purpose is to discuss how the local civil defense agency is using civil defense materials and films, and to get his reaction to the student evaluation of materials studied, and the student survey of citizen knowledge of the civil defense effort.

9. Find out what civil defense education and training programs are available. Develop and present a school assembly program describing civil defense education and training as related to citizen responsibility. Invite parents and citizen organizations to the program.

Evaluation:

1. Have the students write a paper recommending specific improvements in education, training, and information materials. Send the paper as a class project to the local, State, or national civil defense agency.

2. Restudy the pre-test to note changes in knowledge concerning civil defense.

3. Ask students to discuss various factors which might change the emphasis of civil defense programs and materials (political, social, military, economic, scientific).

Materials:

1. Information and education publications, films, displays, etc., available through your local civil defense director. See Appendixes III and IV for descriptions of civil defense materials. Publications preceded by o are provided with this handbook.

2. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision.

   c. Publications Index, OCD/DOD. MP-20. Latest edition.

   d. Civil Defense Motion Picture Catalog, OCD/DOD. MP-6. Latest edition.

3. Other Instructional Aids:

   a. Library Source materials on civil defense and nuclear war, encyclopedia, periodicals, books.

   b. Student-made charts, diagrams, transparencies, etc.

SUGGESTED PRETEST

Civil Defense Education and Training

1. If you are exposed to radiation, you are sure to die.

2. Fallout from just one nuclear bomb may cover thousands of square miles.

3. There is a new pill you can take that will protect you against radioactive fallout.

4. If someone has radiation sickness, you should avoid getting near him so you won't catch it yourself.

5. A nuclear war would contaminate the water supply, and almost everyone would die before the water was fit to drink again.

6. A nuclear war would destroy all food and ways of producing food, so you would die soon--even if you were protected by a shelter.

7. A plastic suit with a filtering mask is adequate protection against fallout.

8. Most fallout rapidly loses its power to harm people.

9. After a nuclear attack, if you filter the dust out of the air, the air will be safe to breathe.

10. The radioactivity after an attack would make the earth, or some areas of it, unhabitable for years.

11. If we are attacked, great weather storms from the explosions will sweep the Nation.

12. A fallout shelter should have an airtight door to guard against radiation.

13. There are no civil defense community shelters in this area.

14. You cannot see fallout.

15. Our community has an active civil defense program.

16. Our community has a comprehensive plan to deal with disasters.

17. Our school has an emergency operations plan.

18. Emergency supplies (food ration, water containers, health and medical kits, radiation monitoring kits) are available in our community.

19. Our school has space available for protection against radioactive fallout.

20. Only an underground shelter offers protection against radioactive fallout.

THE STUDENT AND GOVERNMENT IN EMERGENCY
SECONDARY LEVEL

SAMPLE UNIT 7
POST-DISASTER ACTION

2 to 5 class sessions

General Purpose: To develop an understanding of the role of civil defense in a post-disaster period.

Performance Objectives:

Gather information about the need for post-disaster planning, and on the types of help communities require after a disaster.

Analyze and understand the need for preparation for post-disaster organization and the continuing need for cooperation during this period.

Suggested Activities:

Post-disaster action should be studied only after you and your pupils have some background knowledge of the planning done by local, State, and national governments to prepare for natural and man-made disasters. This unit should be used, therefore, only after one or more of the other junior-senior high school units have been studied. Unit 1 is recommended as particularly appropriate.

1. Have students gather information of past disasters relative to the cleanup and rebuilding of communities after earthquakes, tornadoes, hurricanes, blizzards, large-scale fires, civic disorders, floods, and other natural and man-made disasters. Material from the Office of Civil Defense, newspaper and periodical stories and pictures, films, and other sources should be explored. (See Readers Guide to Periodic Literature). This activity lends itself to group study.

2. Have one or two students report on the postwar problems faced by the surviving residents of Hiroshima and Nagasaki.

3. Discuss together the concept of government in emergency and the functions of government and other groups in a post-disaster situation. Then present the idea: "Suppose the disaster was so great and so widespread that the structure of government didn't survive. Suppose there was no government. What would the survivors do?"

4. Have the class pretend that they are post-disaster survivors in their community and discuss what they would have to do as individual citizens and as members of a government or community organization, industry, etc., to help get the community going again.

5. Play the Community Response Game. (See Sample Unit 5.)

Evaluation:

1. Have each student make a list of what he considers the priority items of reconstruction following a community disaster. Compare. Discuss.

2. Discuss human interdependence and the need for cooperation during and after disaster situations.

3. List the government and quasi-government agencies, industries, civic organizations, and voluntary groups that are involved in post-disaster planning and action, and some of the functions performed by each.

Materials: See Appendixes III and IV for information on procurement. Publications marked o are included with this handbook.

1. Basic References:

   o a. In Time of Emergency, OCD/DOD. H-14. 1968. Pages 73-74.

   o b. Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision. Chs. 7 and 9.

   c. Hurricane Dora, OCD/DOD. MP-50. 1964.

   d. Hurricane Carla, Treadwell, Mattie E., OCD/DOD. MP-32. 1961.

   e. Local and State post-disaster plans.

2. Films:

   a. Hurricane Called Betsy, DOD CD 20-251, b/w, 28:54 min.

   b. Though the Earth Be Moved, DOD CD 20-238, b/w, 25 min.

3. Other Instructional Aids:

   a. Community Response Game, Simulatics Corp., 16 E. 41st Street, New York, New York 10017.

   b. Collections of pictures showing damage caused by disasters.

   c. Library resources--books, encyclopedia, periodicals--stories about disasters and ways in which they were met.

Appendix I

A STUDENT CHECKLIST FOR SCHOOL EMERGENCIES

This checklist is the property of _____ grade _____

My school is _____my teacher is _____

My school has a fallout shelter _____

We have drills to learn our way to the shelter _____

We have a map or instructions for our route to the shelter _____

Food, water, and other emergency supplies are stored in the shelter _____

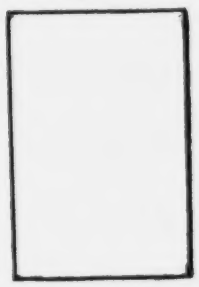
We have fire drills every _____

We have a fire drill map or instructions for our route outside _____

I know what to do in case of an emergency _____

I know where public fallout shelters are located _____

The sign marking a public fallout shelter looks like this:--->



We have a fallout shelter in my home _____

My family has discussed what we will do in time of emergency_____

I think everyone should fill out a checklist like this _____

I think the following things should be done to prepare my school better for an emergency:

_____

_____

_____

_____

APPENDIX II

OUTLINE FOR FAMILY EMERGENCY PLANNING

THE _____ FAMILY EMERGENCY PLAN

To Be Answered By The Head of the Household:

If an emergency should occur, each member of my family knows where to go for shelter (may be different for various types of disasters, ie, for tornado the basement might be the best shelter)

If we are all at home we will go to the following shelter

_____

If I am at work I will go to the following shelter _____

_____

My wife will go to the following shelter if she is at home alone _____

_____

My children will go to the following shelters if they are at school.

1. Name _____ Shelter _____

2. Name _____ Shelter _____

3. Name _____ Shelter _____

4. Name _____ Shelter _____

5. Name _____ Shelter _____

(If there is no shelter at school, the closest shelter to school for each child above should be listed)

The best route for each of us to take has been identified and each member of the family knows how to reach a shelter in all of the above instances. Yes _____ No_____

If we are all at home (or some of us) and we cannot reach a public shelter we will go to the safest area of our basement.

The safest area of our basement is (Southwest corner, etc)

_____

If someone in our family is too small, too old, or physically unable to walk to shelter, they will be assisted by _____

_____

If we go to our basement fallout shelter, we have a supply of food and water that could last us for at least two weeks.

Yes _____ No_____

(See list of suggested food supplies on page 86.

We also have the following emergency supplies:

First Aid Supplies: Yes _____ No _____

Sanitation Supplies: Yes _____ No _____

Battery powered radio: Yes _____ No _____

Special Medicines: Yes _____ No _____

Special Foods: Yes _____ No _____

Infant Supplies: Yes _____ No _____

Firefighting Equipment: Yes _____ No _____

Changes of Clothing: Yes _____ No _____

(See list of suggested supplies on page 87.

Each member of my family knows how to shut off utilities if necessary.

Water (location of valve) _____

Electricity (location of master switch) _____

Gas (location of valve) _____

Oil (location of valve) _____

Other _____

If our family becomes separated we will unite at _____

_____

or if this location is not available at _____

_____

PERSONAL AND FAMILY PREPAREDNESS FOR EMERGENCIES

THE FAMILY RECORDS:

Personal Statistics

Head of Household:

Name _____ Date of Birth: _____

Place of Birth: _____

Street: _____ City and State: _____

Telephone Number: _____ Years at Present Address _____

Prior Address: _____

Father's Name: _____ Place of Birth _____

_____ Date of Birth: _____

Mother's Maiden Name: _____ Place of Birth _____

_____ Date of Birth: _____

Occupation and Title _____ Social Security Number __

_____ When employed by Firm: _____

Name of Company: _____ Business Address: _____

_____ How Long in Profession _____

Business telephone number: _____

Service Record:

Branch of Service: _____ Serial No. _____

Date Entered Service: _____ - Place _____

Date of Separation: _____ Place _____

Theater(s) of Service: _____ Rank _____

Additional Remarks _____

_____

Personal Statistics (continued)

WIFE

Name_____Date of Birth_____

Place of Birth_____Street_____

City and State_____Tel. No._____

Years at Present Address_____Prior Address_____

Father's Name_____Place of Birth_____

_____Date of Birth_____

Mother's Maiden Name_____

Place of Birth_____Date of Birth_____

Occupation and Title_____Social Security

Number_____When Employed by Firm_____

Name of Company_____Business Address_____

Business Telephone Number_____How Long In Pro-

fession_____

Service Record:

Branch of Service_____Serial No._____

Date Entered Service_____Place_____

Date of Separation:_____Place_____

Theater(s) of Service_____

Rank_____

Additional Remarks_____

_____

_____

_____

REGISTRY OF CHILDREN

Name_____Address_____

Date of Birth_____Place of Birth_____

Name_____Address_____

Date of Birth_____Place of Birth_____

Name_____Address_____

Date of Birth_____Place of Birth_____

Name_____Address_____

Date of Birth_____Place of Birth_____

Name_____Address_____

Date of Birth_____Place of Birth_____

Name_____Address_____

Date of Birth_____Place of Birth_____

Additional Information Regarding Children:_____

_____

_____

_____

_____

Other Relatives

Name_____Relationship_____

Address_____Telephone No._____

Name_____Relationship_____

Address_____Telephone No._____

LOCATION OF IMPORTANT PAPERS

It is important to have valuable papers stored in a safe place, or at least, to be able to find them easily if they are not all in the same location. Listing the location of important papers and other valuables can help you or a relative find them if necessary.

List The Location Of The Various Following Papers:

Birth Certificate_____

Marriage License_____

Will_____

Life Insurance Policies_____

Accident and Health Policies_____

Stock Certificates, Bonds, etc_____

_____

Copy of Mortgage or Lease_____

Deed To Home_____

Bill of Sale on, or Title to, Automobile_____

Tax Returns, Receipts or Cancelled Checks_____

Citizenship Papers, if Naturalized _____

Military Discharge Papers_____

Other Important Documents or Valuables_____

_____

Safe Deposit Box:

Address of Bank_____ Box No._____

Name of Person Having Access to Box_____

Location of Keys_____

Banks:

Name and Address of Bank_____

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FOOD AND WATER:

In an emergency water is essential. Water systems might go our of operation. You need to store at least 4 gallons of drinking water per person for your family, and more would be better.

If no stored water is available you could use the following:

- Your home water system - pipes, pressure or storage tanks, water heater, flush tanks of toilets
- Your refrigerator or freezer, ice cubes, melted frost.
- Properly sealed and covered wells
- springs. Provided the spring and outlet are covered and protected from surface run-off.

FOOD:

Include foods that:

- Your family likes
- Require little or no water
- Can be eaten without heating
- Are put up in one-meal sizes
- Take minimum storage space
- Can be rotated in your home food supply (fruit juices every 3-6 months, prepared foods every 6 months to 1 year)
- Have a long shelf life

You should have:

1. Beverages: fruit and vegetable juices, powdered coffee, tea, milk, soft drinks, canned milk
2. Prepared foods: canned hash, spaghetti dinners, salmon, tuna, chicken and noodles, baked beans and frankfurters (without tomato sauce)
3. Vegetables: peas, corn, lima beans, etc
4. Fruits: Peachers, pears, prunes, apricots
5. Staples: Crackers, cookies, pretzels
6. Spreads for crackers and sandwiches: peanut butter, cheese spreads, meat spreads
7. Soups: Vegetable, pea, noodle beef, clam chowder, mushroom, other than tomato
8. Sugar and salt
9. Special food for dietetics and/or infants

SHELTER SUPPLIES AND EQUIPMENT:

1. Beds - cots, bunks, sleeping bags, blankets
2. Clothing - warm clothing, boots, disposable coveralls
3. Utensils - paper plates, cups, knives, forks, spoons, pans, can opener
4. Sanitation - garbage can, newspapers, paper and plastic bags, disinfectant, soap, deodorizers, personal supplies, toilet tissue, wash pan, towels
5. Items for shelter living - folding tables and chairs, games and puzzles, paper, pencils, crayons, rading materials, Bible, sewing kit, first aid kit, medicines, camp stove, clock, calendar, matches, string and rope, broom and dust pan, wrench and pliers, candles, lanterns, crowbar, saw, axe, shovel, radio (battery type), flashlight and batteries, fire extinguisher

Medical supplies must be tailored to individual needs of the family. However, the following basic list will be helpful in preparing to meet those needs:

antiseptic solution
aspirin tablets (5-grain)
baking soda
cough mixture
diarrhea medication
ear drops
table salt
toothache remedy
first aid handbook
specific medications recommended by your physician
adhesive tape, roll (2" wide)
applicators, sterile, cotton-tipped
bandage, sterile roll (2" wide)
bandage, sterile roll (4" wide)
bandages, triangular (37"X37"X52")
bandages, (can of plastic strips, assorted sizes)
cotton, sterile, absorbent
laxative
motion sickness tablets (for nausea)
nose drops (water soluble)
petroleum jelly
rubbing alcohol
smelling salts
dressings, sterile (4"x4")
safety pins (assorted sizes)
sanitary napkins
soap
scissors
splints, wooden (18" long)
thermometer (clinical oral or rectal type)
tweezers
water purification materials
first aid handbook

Appendix III

BIBLIOGRAPHY

General Information

Most of the publications in this listing are published by the Office of Civil Defense, Department of Defense. They are identified by the symbol "OCD/DOD" following the title. These publications should be readily available from your local, State or Regional Director of Civil Defense, or he can give you instructions on how to procure them through the Office of Civil Defense supply channels. State and Regional Directors of Civil Defense are listed in appendixes VI and VII.

Publications listed from sources other than civil defense are readily available.

Symbols preceding publications:

o Provided with this handbook.

* Listed as a basic reference in sample units.

** U. S. Department of Agriculture (USDA) publications. Available in limited quantities from the State Cooperative Extension Service of your Land-Grant College or University, or from your local USDA Extension agent.

Bibliography:

Awards, National School Fallout Shelter Design Competition, OCD/DOD. TR-19. 1963 Reports on the award-winning designs for dual-purpose shelter space in new school construction, resulting from a contest conducted by the American Institute of Architects, for the Office of Civil Defense. Contains basic concepts of shelter in school designs. Illustrated.

Civil Defense Discourse, The, Nehnevajsa, Jiri, Research Office of Sociology, University of Pittsburgh. 1965. Paper presented before the Civil Defense Conference on Training and Education, OCD/DOD. December 6 - 8, 1965.

o*Civil Defense Motion Picture Catalog, OCD/DOD. MP-6

Annotated listing of films and how to obtain them.

Civil Defense, U.S.A. A Programmed Orientation to Civil Defense, Staff College, OCD/DOD, 1968.
SM-5.1, Unit 1, Civil Defense--Protection Against What?
SM-5.2, Unit 2, Nuclear Weapons Effects;
SM-5.3, Unit 3, Shelters;
SM-5.4, Unit 4 Warning, Emergency Operations, and Support Programs;
SM-5.5, Unit 5 Governmental Responsibilities for Civil Defense.

Available by enrollment only. See your local civil defense director or write to the State Civil Defense Office (Appendix VI) for enrollment information. A thorough coverage of Civil Defense; self-instruction, programed.

Committees for Community Shelter Planning, Brown, David S., OCD/DOD. MP 36. 1966.

Advises civil defense directors on the organization and use of committees and councils in community planning.

*Community and Family Service for Civil Defense, OCD/DOD. H-11. 1967.

Describes ways and means by which voluntary organizations can advance the community civil defense program.

*Community Involvement in Civil Defense: Suggestions by the American National Red Cross. OCD/DOD. H-11-A. 1965.

Contains suggestions on identifying and involving a wide variety of related local resources in civil defense programs at the community level.

*Community Response Game, Simulatics Corporation, 16 E. 41st Street, New York, New York 10017. 1967.

Simulates problems with which individuals are faced when a community is hit by disaster. Each player is given a role in the simulated community and each must make decisions and act.

**Family Food Stockpile for Survival, USDA. Home and Garden Bulletin 77.

Recommended two-week food supply, meal planning, cooking equipment, and ways of purifying water.

Health, Grade Seven - Health, Safety, Fitness (Teacher's Edition) Byrd, Oliver E., M.D.; Neilson, Elizabeth A., Moore, Virginia D. Laidlaw Bros. 1966.

Discusses Civil Defense from the overall view as well as health, in Chapter II, "Safety and a National Emergency."

Hurricane Carla, Treadwell, Mattie E., OCD/DOD. MP-32. 1961.

An account of the successful evacuation of coastal areas during Hurricane Carla, designed to make the lessons available nationwide for planning.

Hurricane Dora, OCD/DOD. MP-50. 1964.

A report concerning the emergency actions of State and local government, the military services, and federal agencies in preparing for and meeting the effects of one of the largest and most violent tropical storms.

o*In Time of Emergency: A Citizen's Handbook on Nuclear Attack and Natural Disasters, OCD/DOD. H-14. 1968.

96-page handbook designed to help people prepare for nuclear attack or major disaster. The nuclear attack section contains a checklist of emergency actions; explains the hazards of attack; and gives basic guidance on warning, public and private fallout shelters, improvising fallout protection, shelter supplies and how to manage them, sanitation, fire hazards, and care of the sick and injured. The natural disaster section offers general advice applicable to various types of catastrophes, plus specific guidance on floods, hurricanes, tornadoes, winter storms, and earthquakes.

Meetings that Move, OCD/DOD. H-11-1. 1967.

Booklet for organizations and associations at the community level, describing participative techniques and 3 seminar-workshop guides entitled "Adjusting to Living in the Nuclear Age", "Preparedness and Natural Disasters", and "Fallout Shelters in Schools".

Meetings that Move, Vol. 2, OCD/DOD. H-11-2. 1967.

Booklet for use of organization and associations at the community level, containing guidelines on publicity and 2 workshop-seminar guides entitled "Why Civil Defense" and "Fallout Shelters in New Buildings".

Meetings that Move, Vol. 3, OCD/DOD. H-11-3. 1966.

Booklet for use of organizations and associations at the community level, describing ways to get ideas across, and containing 3 seminar-workshop guides entitled "The Warning Story", "Emergency Communications" and "Emergency Operating Centers".

Meetings that Move, Vol. 4, OCD/DOD. H-11-4. 1967.

Booklet to help program chairmen of community organizations and groups plan and conduct seminar-workshops on Community Shelter Planning (CSP) on the following subjects: Planning Factors in the CSP Program; Providing Citizens with Information; Status of Community Shelter Planning in Community; Shelter Space in New Buildings; The Role of Community Agencies in CSP, and in Various Supporting Services.

National School Fallout Shelter Design Competition Awards, The, OCD/DOD. TR-19. 1963.

o*Personal and Family Survival, OCD/DOD. SM 3-11. 1966 Revision.

Text for Civil Defense Adult Education Courses. Contains a comprehensive review of civil defense programs, policies, and procedures. Instructs on personal and family preparedness.

*Publications Index, OCD/DOD. MP 20.

Lists OCD publications and gives instructions for procurement.

Publications available to the general public are listed on page 24.

Instructions on procurement are given on pages 4 and 5. Consult the local or State civil defense offices first.

**Radioactive Fallout on the Farm, USDA, Farmers Bulletin 2107.

A general awareness and facts bulletin.

*Realistic Approach to Civil Defense, A, American Association of School Administrators, National Commission on Safety Education, Office of Civil Defense. OCD/DOD. MP-36. 1966.
Single copies are also available free upon request from the National Commission on Safety Education, National Education Association, 1201 16th Street, N.W., Washington, D. C.

Tells the story of a new school civil defense program of administration, protection, and education, based on experiences of school administrators. Contains a discussion on civil defense in the curriculum.

Fallout Protected Schools, OCD/DOD. TR-41.

Outlines the basic concepts of protection from gamma radiation, and describes, with illustrations, school buildings with fallout shelters.

*Status of the Civil Defense Program, OCD/DOD. MP 46.

Outlines the history of civil defense and gives a short, concise summary of the program. Updated semiannually.

**Your Farm Preparedness Plan, USDA PA 583.

A suggested form and approach for use in developing a farm plan to accompany a family survival plan.

**Your Tomorrow: 4-H in the Nuclear Age, USDA PA 586.

Motivational piece for 4-H members, telling what they can do in a local civil defense program.

Appendix IV

OFFICE OF CIVIL DEFENSE

FILMS RECOMMENDED IN UNITS

See your local civil defense director and the Civil Defense Motion Picture Catalog for instructions on procurement.

About Fallout, DOD CD 3-220, color, 24 min.

The most definite film on this phenomenon of the Nuclear Age now available to the general public.

Designed to dispel many of the common myths and fallacies now surrounding the subject in the public mind -- and to present the facts, as clearly and simply as possible, in layman's terms.

Based on the Government's many intensive scientific studies, it uses both animation and live action to illustrate the basic nature of fallout radiation, its effects on the cells of the body, what it would do to food and water after a nuclear attack, and what simple commonsense steps can be taken to guard against its dangers. A 1964 American Film Festival finalist.

Briefly, About Fallout, DOD CD 3-256, color, 8:18 min.

A condensed version of About Fallout.

It covers the highlights of the major film, explaining basic facts about the nature of radioactive fallout and the three principal weapons of defense against it.

Face of Disaster, The, DOD CD 20-239, b/w, 10 min.

This film highlights some of our recent major natural disasters -- the great Alaskan quake of 1964, the floods of 1965, the devastation wrought on Palm Sunday when 37 tornadoes struck in the Middle West. Emphasizes the role of community welfare services in helping to meet these emergencies.

Five Days of Betsy, The, DOD CD 20-250, b/w, 11:30 min.

A condensed version of A Hurricane Called Betsy, retaining most of the major highlights of the longer film.

Hurricane Called Betsy, A, DOD CD 20-251, b/w, 28:54 min.

In September, 1965, the most devastating, unpredictable hurricane of the decade swept out of the Caribbean on a 3,000-mile course, leaving a trail of destruction through the Bahamas, Miami, the Florida Keys, and along the Gulf Coast to New Orleans and Baton Rouge.

Before her finish, "Betsy" had forced the astronauts in Gemini Five to cut their orbit short, left thousands homeless and some 80 dead, sent a 16-foot tidal surge roaring across the Delta into New Orleans, and caused a billion dollars damage in Louisiana alone.

A Hurricane Called Betsy tells the story of the storm, the people who fought it, and their victories and losses.

Operation Cue (Revised 1964), DOD CD 20-232, color, 14 min.

A 1964 revision of the OCD motion picture Operation Cue - Revised, released in 1958. The revised film points out the contrast between the Nevada test in 1955 and present nuclear devices, then continues as a documentary report on the 1955 exercise as told from the viewpoint of a newspaperwoman who was invited as an observer. The picture features unusual slow motion photography of the effects of blast on houses, radio towers, etc.

Post Attack World, DOD CD 20-231, b/w, 14:40 min.

Challenges the theory that life would not be worth living after a nuclear attack. Authorities explain the kind of world that could exist after nuclear attack, and what is being done to meet the problems of the postattack period and recovery. Questions about contamination of food, the balance of nature, industry, and continuation of government are discussed.

Shelter on a Quiet Street, DOD CD 5-221, color, 24:02 min.

Designed for those living far from a public fallout shelter, and also for those who, for reasons of personal preference or convenience, would rather stay in a family shelter.

Shows how the family fallout shelter fits into the overall National Shelter Plan, and tells how and why one family decided to build a shelter in the basement of their home. Construction of the basement shelter is shown step-by-step.

Sword and the Shield, The, DOD CD 20-230, b/w, 13:20 min.

Reviews the OCD fallout shelter program, the types of shielding that are effective, the National Shelter Survey, and the supplies that go into a stocked shelter.

Though the Earth Be Moved, DOD CD 20-238, b/w, 25 min.

The Good Friday earthquake of 1964 struck Alaska with a force equal to 10 million atomic bombs of the size that leveled Hiroshima. It took 115 lives, cost more than half a billion dollars in damage, left whole cities helpless and thousands homeless in the wake of shock and fire and seismic sea wave.

Though the Earth Be Moved tells the dramatic story of the quake and the 3 days of crisis that followed.

Honor award in 1965 San Francisco International Film Festival.

Town of the Times, DOD CD 20-222, color, 26 min.

Demonstrates the arguments that come up when a town is faced with the civil defense question -- the resistance, the false information, the do-nothing attitudes. Also demonstrates the results that can be achieved through concerted, directed community action behind such a project, when a community is properly motivated. Stars Ralph Meeker and Larry Gates.

A 1964 American Film Festival finalist.

Appendix V

USEFUL DEFINITIONS

OF

CIVIL DEFENSE TERMS

*Extracted from: Abbreviations and Definitions of Terms Commonly Used in Civil Defense, OCD/DOD. MP-51. 1968.

Attack Warning Signal -- A three to five minute wavering tone on sirens or short blasts on horns or other devices, repeated as deemed necessary. It means that an actual attack against this country has been detected and that protective action should be taken immediately.

As a matter of national civil defense policy, the attack warning signal shall be used for no other purposes and have no other meaning.

Attention (or Alert) Signal -- A three to five minute steady tone used to get public attention in times of imminent peacetime emergencies, such as hurricanes, tornadoes, and floods.

In addition to any other meaning or requirement for action as determined by local government officials, it shall mean to all persons in the United States, "Listen for essential emergency information."

Civil Defense (CD) -- All activities and measures designed or undertaken (1) to minimize the effects upon the civilian population and Government caused, or which would be caused by an attack upon the United States; (2) to deal with the immediate emergency conditions which would be created by any such attack; and (3) to effectuate emergency repairs to, or the emergency restoration of vital utilities and facilities destroyed or damaged by any such attack.

Civil Defense Emergency -- The existence of such emergency may be proclaimed by the President, or by concurrent resolution of the Congress, if the President in such proclamation or the Congress in such resolution, finds that an attack upon the United States has occurred, or is anticipated.

Civil Defense Warning System (CDWC) -- The system over which a warning or other emergency information is transmitted throughout the nation. It comprises Federal, State and local warning systems.

Community Shelter Plan (CSP) -- The document that allocates people to the best available fallout protection; tells the people about it; and identifies by Standard Location (SL) the amount and future unfilled requirement for standard shelter.

Decay (or Radioactive Decay) -- The decrease in activity of any radioactive material with the passage of time, due to the spontaneous emission from the atomic nuclei of alpha particles, beta particles, or gamma radiation.

Decontamination, Radiological -- The reduction or removal of contaminating radioactive material from a structure, area, object or person.

Disaster -- Pertaining to FCC Rules and Regulations, the terms "disaster" or "disaster or other incident" are defined as meaning an occurrence of such nature as to involve the health and/or safety of a community or large area, or the health or safety of any group of individuals in an isolated area to whom no normal means of communication are available, and include, but are not limited to floods, earthquakes, hurricanes, explosions, aircraft or train wrecks, and consequences of armed attack.

Distant Early Warning Line (DEW Line) -- A network of radar stations near the Arctic Circle.

Emergency Broadcast System (EBS) -- Consists of broadcast stations and interconnecting facilities which have been authorized by the Federal Communications Commission to operate in a controlled manner during a war, threat of war, state of public peril or disaster, or other national emergency.

Fallout, Radioactive -- The process of phenomenon of the fallback to the earth's surface of particles contaminated with radioactive material from a cloud of this matter formed by a nuclear detonation. The term is also applied in a collective sense to the contaminated particulate matter itself. The early (or local) fallout is defined, somewhat arbitrarily, as those particles which reach the earth within 24 hours after a nuclear explosion. The delayed (or worldwide) fallout consists of the smaller particles which ascend into the upper troposphere and into the stratosphere and are carried by winds to all parts of the earth. The delayed fallout is brought to earth mainly by rain and snow, over extended periods ranging from months to years.

Federal Disaster Act -- Public Law 875, 81st Congress, as amended, gives the President broad powers to supplement the efforts and available resources of State and local governments in carrying out their responsibilities

to alleviate suffering and damage resulting from major (peacetime) disasters.

Home Fallout Protection Survey (HFPS) -- A system developed by OCD through which householders can fill out forms describing the size, shape, and construction of their homes. Following this, a computer determines the protection factor against fallout radiation. Also, this Survey has been referred to as EFPH, "Evaluation of Fallout Protection in Homes:" RAHS, "Rapid Analysis of Home Shelter;" and HBS, "Home Basement Survey."

Major Disaster -- Public Law 875, 81st Congress, as amended, provides that any flood, drought, fire, hurricane, earthquake, storm or other catastrophe in any part of the United States which, in the determination of the President, is or threatens to be of sufficient severity and magnitude to warrant disaster assistance by the Federal Government to supplement the efforts and available resources of State and local governments in alleviating the damage, hardship or suffering caused thereby.

Nacom I -- National Civil Defense landline teletype and telephone system connecting the Federal and State Civil Defense Headquarters.

Nacom II -- The National Civil Defense Radio System which backs up Nacom I.

National Fallout Shelter Survey (NFSS) -- The analysis of existing large buildings and subsurface enclosures by architects and engineers qualified in fallout shelter analysis to identify protected space suitable for use as public fallout shelters.

Nuclear Radiation -- Particulate and electromagnetic radiation emitted from atomic nuclei in various nuclear processes. The important nuclear radiations, from the weapons standpoint, are alpha and beta particles, gamma rays, and neutrons. All nuclear radiations are ionizing radiations, but the reverse is not true; X-rays, for example, are included among ionizing radiations, but they are not nuclear radiations since they do not originate from atomic nuclei.

OCD Fallout Shelter Criteria -- A protection factor of 40 or greater; a minimum of 10 square feet of shelter floor space; and 65 cubic feet of space per person. At least 3 cubic feet of fresh air per minute per person when capacity is based upon minimum space requirements. The cubic feet of space per person is increased with decreased ventilation. In unventilated underground space, 500 cubic feet of space per person is required.

Office of Emergency Preparedness (OEP) -- Assists the President in coordinating the emergency planning activities of the Federal Government and makes plans for the direction of governmental, economic, and other activities as may be determined by the President.

Packaged Disaster Hospital (PDH) -- A unit of sufficient medical supplies and equipment to establish a complete 200-bed hospital. These units, owned by the Federal Government, strategically placed throughout the United States, are packed for long term storage to augment medical facilities in time of major disaster. (Previously referred to as Civil Defense Emergency Hospital.)

Peacetime Disaster -- Peacetime disaster includes natural disasters as well as explosions, nuclear accidents, aircraft crashes in populated areas, etc.

Protection Factor (PF) -- A number used to express the relationship between the amount of fallout gamma radiation that would be received by a person in a completely unprotected location and the amount that would be received by a person in a protected location.

Public Fallout Shelter -- A shelter facility which contains fallout shelter meeting OCD criteria, for 50 or more persons, and which has been licensed for public use in an emergency.

RADEF Kit -- OCD instruments used to detect and measure the effective nuclear radiation in a location affected by fallout.

Radio Amateur Civil Emergency Service (RACES) -- An emergency service designed to make efficient use of the vast reservoir of skilled radio amateurs throughout the Nation in accordance with approved civil defense communications plans. Many of the states and local governments have federally approved RACES communications plans whereby radio amateurs participating in these plans are permitted to operate during an emergency, or emergency condition.

Radiological Monitoring -- The procedure or operation of locating and measuring radioactive contamination by means of survey instruments which can detect and measure (as dose rates) ionizing radiations. The individual performing the operation is called a monitor.

Shelter, Fallout -- A habitable structure or space used to protect its occupants from fallout radiation.

Shelter Management -- The internal organization, administration and operation of a shelter facility by either pretrained or emergent leadership.

Shielding -- Any material or obstruction which attenuates radiation and thus tends to protect personnel from the effects of gamma radiation. A moderately thick layer of any opaque material will provide satisfactory shielding from thermal radiation, but a considerable thickness of material of high density is needed for nuclear radiation shielding.

Staff College (SC) -- The OCD Staff College is the major national civil defense training center for the Office of Civil Defense and is responsible for planning, developing and conducting courses of instruction in a variety of civil defense subject areas.

Support Systems -- Operating elements of civil defense not directly a part of the shelter system (and capable of existing independently of it), but which either insure or enhance the survival capability of the shelter system or replace it in the shelter emergency (post-attack) period; such elements would include radiological monitoring, communications, traffic control, public order (police), firefighting, rescue, decontamination, medical care, public health, and emergency feeding.

Surface Burst -- The explosion of a nuclear weapon at the surface of the land or water, or at a height above the surface less than the radius of the fireball at maximum luminosity (in the second thermal pulse). An explosion in which the weapon is detonated actually on the surface is called a contact surface burst, or true surface burst.

Thermal Energy -- The energy emitted from the fireball as thermal radiation. The total amount of thermal energy received per unit area at a specified distance from a nuclear (or atomic) explosion is generally expressed in terms of calories per square centimeter. See Thermal Radiation.

Thermal Radiation -- Electromagnetic radiation emitted (in two pulses from an air burst) from the fireball as a consequence of its very high temperature; it consists essentially of ultraviolet, visible and infrared radiations. In the early stages (first pulse of an air burst), when the temperature of the fireball is extremely high, the ultraviolet radiation predominates; in the second pulse, the temperatures are lower and most of the thermal radiation lies in the visible and infrared regions of the spectrum. From a high altitude burst, the thermal radiation is emitted in a single short pulse.

Thermonuclear -- An adjective referring to the process (or processes) in which very high temperatures are used to bring about fusion of light nuclei, such as those of the hydrogen isotopes (deuterium and tritium), with the accompanying liberation of energy. A thermonuclear bomb is a weapon in which part of the explosion energy results from thermonuclear fusion reactions. The high temperatures required are obtained by means of a fission explosion.

Warning -- The alerting of civil defense forces and the public to the threat of extraordinary danger and the related effects of both enemy caused and natural disasters.

Warning Center -- A facility staffed by attack warning officers from which warning will emanate.

Appendix VI

STATE CIVIL DEFENSE OFFICIALS

State and OCD Region	Address
ALABAMA 3	Director, Civil Defense Department State of Alabama Basement, State Administrative Building 64 North Union Street Montgomery, Alabama 36104
ALASKA 8	State Director Alaska Disaster Office 1111 East Fifth Avenue Anchorage, Alaska 99501
ARIZONA 7	Director, Department of Civil Defense and Emergency Planning State Capitol Building Pheonix, Arizona 85007
ARKANSAS 5	State Director, The Executive Office of Civil Defense & Disaster Relief Post Office Box 845 Conway, Arkansas 72032
CALIFORNIA 7	Director, California Disaster Office Post Office Box 9577 Sacramento, California 95823
COLORADO 6	The Adjutant General and State Director of Civil Defense 300 Logan Street Denver, Colorado 80203
CONNECTICUT 1	State Civil Defense Director Military Department State Armory, 360 Broad Street Hartford, Connecticut 06115
DELAWARE 2	Director, State Department of Civil Defense Delaware City, Delaware 19706
DISTRICT OF COLUMBIA 2	Director of Civil Defense District of Columbia Government Municipal Center, Room 5007 300 Indiana Avenue, N. W. Washington, D. C. 20016

FLORIDA 3	Director, Florida Department of Civil Defense 1045 Riverside Avenue Jacksonville, Florida 32204
GEORGIA 3	The Adjutant General and State Civil Defense Director Department of Defense State of Georgia 959 E. Confederate Avenue, S. E. Post Office Box 18055 Atlanta, Georgia 30316
HAWAII 7	The Adjutant General and Director of Civil Defense State of Hawaii Building 24, Fort Ruger Honolulu, Hawaii 96816
IDAHO 8	Director, Office of Disaster Relief and Civil Defense State Office Building 650 West State Street Boise, Idaho 83701
ILLINOIS 4	Director, Illinois Civil Defense Agency 111 East Monroe Springfield, Illinois 62706
INDIANA 4	Director, Indiana Department of Civil Defense 100 North Senate Avenue Indianapolis, Indiana 46204
IOWA 6	Director, Civil Defense Division State Office Building, Room B-33 Des Moines, Iowa 50319
KANSAS 6	Deputy State Civil Defense Director Civil Defense Division Basement, State Capitol Building Topeka, Kansas 66612
KENTUCKY 2	The Adjutant General and State Director of Civil Defense The Capitol Frankfort, Kentucky 40601
LOUISIANA 5	State Director of Civil Defense Building 309-A, Area B Jackson Barracks New Orleans, Louisiana 70140
MAINE 1	Director, Civil Defense and Public Safety State House Office Building Augusta, Maine 04330

MARYLAND 2	Director, Maryland Civil Defense Agency Pikesville, Maryland 21208
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MISSOURI 6	Director, Disaster Planning and Operations Office Civil Defense 221 West High Street Post Office Box 116 Jefferson City, Missouri 65101
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NEBRASKA 6	The Adjutant General and Director Nebraska Civil Defense Agency 1300 Military Road Lincoln, Nebraska 68508
NEVADA 7	Director, Nevada State Civil Defense and Disaster Agency State Capitol Building Carson City, Nevada 89701
NEW HAMPSHIRE 1	The Adjutant General and Director New Hampshire Civil Defense Agency Military Reservation Airport Road Concord, New Hampshire 03301
NEW JERSEY 1	Director of New Jersey Civil Defense Division Armory Drive Post Office Box 979 Trenton, New Jersey 08625

NEW MEXICO 5	Director, New Mexico Office of Civil Defense and Defense Mobilization Post Office Box 4277 Santa Fe, New Mexico 87502
NEW YORK 1	Director, New York State Civil Defense Commission Public Security Building State Office Building Campus Albany, New York 12226
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NORTH DAKOTA 6	Director, State Civil Defense Division Office of the Adjutant General Fraine Barracks Bismarck, North Dakota 58501
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OKLAHOMA 5	Director of Civil Defense State of Oklahoma Emergency Operating Center State Capitol, P. O. Station Box 53365 Oklahoma City, Oklahoma 73105
OREGON 8	Director, Department of Emergency Services Room 21, State Capitol Salem, Oregon 97310
PENNSYLVANIA 2	Director of Civil Defense State Council of Civil Defense Highway and Safety Building Harrisburg, Pennsylvania 17120
RHODE ISLAND 1	State Director of Civil Defense Rhode Island Council of Civil Defense State House Providence, Rhode Island 02903
SOUTH CAROLINA 3	Director, South Carolina Civil Defense Agency Rutledge Building 1429 Senate Street Columbia, South Carolina 29201
SOUTH DAKOTA 8	State Emergency Operations Center State Capitol Building Pierre, South Dakota 57501

TENNESSEE 3	State Director, Civil Defense Military Department of Tennessee National Guard Armory Sidco Drive Nashville, Tennessee 37204
TEXAS 5	State Coordinator, Division of Defense and Disaster Relief Texas Department of Public Safety P. O. Box 4087, N. Austin Station Austin, Texas 78751
UTAH 7	Director, Office of Civil Defense and Emergency Preparedness Post Office Box 8100 Salt Lake City, Utah 84108
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WEST VIRGINIA 2	Director, Department of Civil and Defense Mobilization 806 Greenbrier Street Charleston, West Virginia 25311
WISCONSIN 4	Administrator, Division of Emergency Government Hill Farms State Office Building 4802 Sheboygan Avenue Madison, Wisconsin 53702
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COMMONWEALTH OF PUERTO RICO 1	Director, Office of Civil Defense Post Office Box 5127 Puerta de Tierra Station San Juan, Puerto Rico 00906
GUAM 7	Chief Commissioner of Guam and Director of Civil Defense Government of Guam Post Office Box 786 Agana, Guam 96910

Appendix VII

CIVIL DEFENSE EDUCATION COORDINATORS

Alabama

Coordinator
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Montgomery, Alabama 36104

Alaska

Coordinator
Civil Defense Education
University of Alaska
523 8th Avenue
Anchorage, Alaska 99501

Arkansas

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Civil Defense Education
State Department of Education
Education Building
State Capitol Mall, Suite 406W
Little Rock, Arkansas 72201

California

Coordinator
Civil Defense Education
State Department of Education
State Building, Room 218
217 West First Street
Los Angeles, California 90012

Colorado

Coordinator
Civil Defense Education
University of Colorado
Academy Building
970 Aurora Rm. 230
Boulder, Colorado 80302

Connecticut

Coordinator
Civil Defense Education
State Department of Education
Hartford, Connecticut 06115

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State Department of Public Instruction
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Dover, Delaware 19901

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Dept. of Adult & Industrial Education
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Washington, D. C. 20016

Florida

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State Department of Education
Pepper Building, Room 314
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Tallahassee, Florida 32301

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Boise, Idaho 83707

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Springfield, Illinois 62701

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Office of the State Superintendent of
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Indianapolis, Indiana 46204

Iowa

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Iowa Department of Public Instruction
Des Moines, Iowa 50319

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Kansas State Education Building
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Topeka, Kansas 66612

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State Department of Education
865 East Main Street
Frankfort, Kentucky 40601

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State Department of Education
Baton Rouge, Louisiana 70804

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State Department of Education
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Lansing, Michigan 48912

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Missouri State Department of Education
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Cooperative Extension Service
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Bozeman, Montana 59715

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Carson City, Nevada 89701

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805 Yale Street, N. W.
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New York State Education Department
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Albany, New York 12224

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Department of Public Instruction
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115 Hillsboro Street
Raleigh, North Carolina 27602

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The Department of Public Instruction
MDU Office Building - Room 217
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Bismarck, North Dakota 58501

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State Department of Education
State Capitol Building
Oklahoma City, Oklahoma 73105

Oregon

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Salem, Oregon 97310

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State Department of Education
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Rhode Island

Chief, Division of Adult Education
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Providence, Rhode Island 02908

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Columbia, South Carolina 29201

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State Department of Public Instruction
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Pierre, South Dakota 57575

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State Department of Education
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Texas Education Agency
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